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(54) Title: METHODS AND APPARATUS FOR ESTABLISHING AND MAINTAINING INERNET DOMAIN NAME REGISTRATIONS

(57) Abstract: Methods and apparatus for conducting transactions associated with managing Internet domain names includes establishing a connection between application programs of other users and a registrar of Internet domain names over the Internet, authenticating the right of the user to so request fulfillment of a transaction, establishing a secure socket layer within the connection and processing commands after such authentication.



METHODS AND APPARATUS FOR ESTABLISHING AND MAINTAINING INTERNET DOMAIN NAME REGISTRATIONS

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RELATED APPLICATION

This application claims the benefit of U.S. Provisional Application No. 60/153,960, filed September 15, 1999, the disclosure of which is expressly incorporated herein by reference.

Copending U.S. Patent Application Serial No. 09/544,305, filed April 6, 2000, is also expressly incorporated herein by reference.

FIELD OF THE INVENTION

The present invention relates to the field of domain name registration. More particularly, the invention relates to methods and apparatus, which provides an application program interface to enable the registration and maintenance of Internet domain names.

BACKGROUND OF THE INVENTION

The explosive growth of the Internet has created the need for orderly management of the process for creating domain name registrations (also known as Web addresses) and subsequent administrative activities such as changes in ownership, renewals, and so forth. Until recently, Network Solutions, Inc. of Herndon, Virginia was the exclusive entity through which domain name registrations ("DNRs") were acquired and registered, at least for domain names ending in .com, .net, .org and .edu. In such role, Network Solutions, Inc. is known as a Registrar. Approximately five million Web addresses have been registered by Network Solutions, Inc. so far.

Presently-implemented systems for registration of Web Addresses rely almost exclusively on the use of e-mails between users and the Registrar for each step of the process. For example,

FIG. 4 shows the sequence of steps for registration, a customer (Registrant) prepares to register new Web Address 100;

The Registrant fills out a Service Agreement (102). The Service Agreement is submitted by e-mail to the Registrant, for example, to hostmaster@internic.net (step 104). The Request is automatically assigned a tracking number 106. The Service Agreement is automatically checked for errors 108. The Service Agreement is processed if there are no errors and the registrant is notified via e-mail when completed 112. Web Address registration is complete with a message. For example, the message may read: "Your Web Address registration is complete" (step 114). The customer is invoiced for the Web Address registration, step 116, and pays for the registration (step 118).

Finally, the Registrar sends a re-registration notice to registrant 60 days before the two year anniversary of the initial registration (step 120). Should there be an error in the Service Agreement, the registration process is not completed and an e-mail is sent to the customer informing it of the problem (step 110).

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While this process works effectively, it is not without certain shortcomings. Most notably, the use of the Internet for e-mailing notices is not generally on a "real-time" basis. It may sometimes take several days for an e-mail to be delivered, particularly to parts of the world where the Internet support structure is not fully established. In addition, e-mails may become corrupted which creates further delays since the recipient must ask for the messages to be resent.

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Further, recent events have resulted in the development of a concept termed "Wholesaling" by which other organizations, such as Internet Services Providers ("ISP"), Internet hosting providers, Internet portals and Electronic Commerce Providers are allowed to secure such DNRs on behalf of their own customers. In effect, such organizations act as their own Registrars by

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offering their customers an interface which permits unsophisticated and sophisticated users to interface with the registration process and subsequent management thereof. Ultimately, however, DNRs are still issued by the Registrar, Network Solutions, Inc.

This expansion in the number of outlets for securing DNRs has led to the development of systems and methods to facilitate wholesaling.

Network Solutions, Inc. provides the NSI Wholesale Service Protocol ("WSP"), which establishes support of a real-time programmable interface for the purchase and management of Network Solutions, Inc. ("NSI") products and services a system. This system would permit users seeking registrations to complete the process, regardless of their level of expertise in computer technology in general, and the Internet in particular. The WSP uses a simple, connection-based, synchronized, ASCII text-based protocol to communicate with an NSI Wholesale System over the Internet, thereby allowing Wholesalers to securely and reliably create, modify, and delete customer accounts and various products including the registration and management of Internet domain names.

The WSP consists of a set of commands that a Wholesaler may issue to create customers or domain-name-related products. Each command returns a set of 'properties' and major and minor error codes. In many cases, the result of one command is used as input to the next command.

Wholesale commands are either synchronous or asynchronous. Generally, customer creation and management commands are synchronous, while domain creation and management commands are asynchronous. An "as-fast-as-possible" fulfillment system for asynchronous commands maintains queues in order to guarantee that the order is not lost in the case of external system problems. Typical synchronous response times are several seconds or less, while asynchronous times, for example, to complete a registration, are typically less than a few minutes.

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There are two primary security mechanisms in the NSI Wholesale System. All Wholesalers must supply the IP addresses from which they will connect and establish Secure Socket Layer ("SSL") connections to the NSI Wholesale System. They also must use an account number and password when issuing session commands. NSI provides these ahead of time to Wholesalers. While this system provides numerous advantages over the prior art, there is a need to make the system universally available.

Accordingly, there is presently a need for methods and apparatus which provides an application program interface to allow computer application programs of other users, to access the Wholesale system and to conduct transactions associated with the registration and management of Internet domain names in the same manner as the WSP.

SUMMARY OF THE INVENTION

To achieve these objects and other advantages and in accordance with the purposes of the invention, as embodied and broadly described herein. The present invention is directed to methods and apparatus for interfacing a user application program to a system for conducting transactions associated with managing Internet domain names by establishing over the Internet a connection between the user and the system; authenticating the right of the user to conduct a transaction associated with managing Internet domain names; establishing a secure socket layer within the application program interface and the system; receiving a request in the application program interface from the applications program to initiate a transaction following such authentication; and transmitting commands by the application program interface to the system effectuating the transaction.

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BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate an embodiment of the invention and together with the description, serve to explain the principles of the invention. In the drawings,

FIG. 1 is a diagram of a preferred embodiment of the invention, wherein an application program interface, WSP Java API, implements the functionality of a WSP in a series of Java object classes;

FIG. 2 shows an exemplary flowchart of the method for interfacing a user application program to a system for conducting transactions associated with managing Internet domain names;

FIG. 3 shows an exemplary diagram of the apparatus for interfacing a user application program to a system for conducting transactions associated with managing Internet domain names.

DETAILED DESCRIPTION

Reference will now be made in detail to the present preferred embodiment of the invention, an example of which is illustrated in the accompanying drawings. Wherever possible, the same reference numbers will be used throughout the drawings to refer to the same or like elements.

The methods and apparatus provides an application program interface that is accessed by user application programs to establish a connection to a system for conducting transactions associated with managing Internet domain names.

Referring to FIG. 1, a computer application program 12 typically provides an interface to the user to collect customer data. The computer application program 12 typically issues a session request to the application program interface, WSP Java API 14, in order to establish a session over the Internet 10 with the Wholesale System 16 and to issue various commands.

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The WSP Java API 14 is essentially a Java 'wrapper' of the WSP. It consists of two main classes: NSIWholesaleAPI and WSPResponse. The NSIWholesaleAPI contains all of the methods for creating customers, products, and services. WSPResponse is a single class returned from most methods and contains the result of the issued command request and will optionally include any additional data that was generated by the request.

One advantage of using WSP Java API 14 is that when the NSIWholesaleAPI object is created, the object creates a 'pool' of SSL connections to the Wholesale system 16. This class removes the need to issue a 'session' command, and removes the burden from a Wholesaler of making and managing SSL connections. Multi-threaded applications may also use this connection pool.

FIG. 2, shows an exemplary flowchart of the invention. A user 20, sends a request to the application program 12 to conduct a transaction associated with managing Internet domain names. The application program 12 typically provides an interface to a user to collect customer data. The application program 12 typically issues a session request to the application program interface 14 to establish a session over the Internet 10 with the Wholesale System 16. The application program interface 14 will authenticate a user's right to conduct a transaction by attempting to connect to the Wholesale System 16 using user account information received from the application program 12. If the authentication fails, the application program interface 14 will attempt two additional authentications. The application program interface 14 will send the result of the authentication to the application program 12. If the authentication is successful, the application program interface 14 will establish a secure socket layer with the Wholesale System 16. The application program 12 will send a request to the application program interface 14 to make available the set of commands through the instantiation of an object of class NSIWholesaleAPI. The application program 12

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may now send a request to any of the object methods to request the processing of a command. The application program interface 14 will receive the command request along with any data. The application program interface 14 will format the data and the command into a string as described in detail in the aforementioned copending U.S. Patent Application Serial No. 09/544,305. The application program 14 will then transmit the request across the Internet 10 to the Wholesale System 16 to effectuate the transaction. The Wholesale System 16 will process the request and will return the result of the transaction across the Internet 10 to the application program interface 14. The application program interface 14 will send a response to the application program 12.

FIG. 3, is a diagram of an exemplary computer environment in which methods consistent

with the present invention may be implemented. A component is provided for a user 20, to send a request to the application program 12 to conduct a transaction associated with managing Internet domain names. The application program 12 typically provides an interface to user 20 to collect customer data. The application program 12 typically issues a session request to the application program interface 14 to establish a session over the Internet 10 with the Wholesale System 16. A component is also provided for authenticating the right of the user 20 to conduct a transaction. The application program interface 14 will authenticate a user's right to conduct a transaction by attempting to connect to the Wholesale System 16 using the user account information received from the application program 12. If the authentication fails, the application program interface 14 will send the result of the authentication to the application program 12. A component is also provided for establishing a secure socket layer if the authentication is successful. The application program

interface 14 will establish a secure socket layer with the Wholesale System 16. A component is

also provided for initiating a transaction following a successful authentication. The application

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program 12 will send a request to the application program interface 14 to make available the set of commands that are available in the Wholesale System 16 through the instantiation of an object of class NSIWholesaleAPI. The application program 12 may now send a request to any of the object methods to request the processing of a command. The application program interface 14 will receive the command request along with any data. A component is also provided for transmitting commands through the secure socket layer. The application program interface 14 will format the data and command into a string as described in detail in the aforementioned copending U.S. Patent Application Serial No. 09/544,305. The application program 14 will then transmit the request across the Internet 10 to the Wholesale System 16 to effectuate the transaction. The Wholesale System 16 will process the request and return the result of the transaction across the Internet 10 to the application program interface 14. The application program interface 14 will send a response to the application program 12.

The name of the WSP Java API configuration file is typically WSPjavaAPI.conf. This file contains specific information about each Wholesale user. The values for the parameters in that file are provided when a Wholesale agreement is completed with a Registrar, such as NSI. The file includes the following parameters:

WholesaleAPI.minConnections=2

WholesaleAPI.maxConnections=2

WholesaleAPI.connectionSoTimeout=120000

WholesaleAPI.connectionProtocol=WSP1.5

WholesaleAPI.server=XXX.netsol.com

WholesaleAPI.port=X000

WholesaleAPI.retry=1

WholesaleAPI.WholesalerAccountId=12345678

WholesaleAPI.WholesalerPassword=XXXXXXXX



The values indicated with an "X" will change from user to user. The definition of each of these parameters is as follows:

Configuration File Parameters

Name	Type	Typical Value	Definition
minConnections	Positive Integer	2 through 10	Connection Pooling Tuning Parameter
maxConnections	Positive Integer	minConnections through 5	Connection Pooling Tuning Parameter
connectionSoTimeout	Positive Integer	120000	Number of milliseconds of non-use before the API will time out a connection
Server	String	X.netsol.com	Server name for Wholesale protocol at Registrar. The exact name will be provided when the Wholesale agreement is established.
Port	Integer	XXXX	IP Port on the server for connection
WholesalerAccountId	String	XXX	Unique identifier of each Wholesale partner
WholesalerPassword	String	XXXXXX	Unique code, necessary for connection to NSI, for Wholesale operations

CLASS HIERARCHY

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o class java.lang.Object

- o class nsi. wholesale.toolkit.javaapi. NSI Wholesale API
- o class java.lang. Throwable (implements java.io. Serializable)
 - o class java.lang. Exception
 - o class nsi.wholesale.toolkit.javaapi.NSIWholesaleException
 - o class nsi.wholesale.toolkit.javaapi. WSPException
 - o class nsi.wholesale.toolkit.javaapi.InvalidArgumentException
 - o class nsi. wholesale.toolkit.javaapi. InvalidResponseFormatException
- o class nsi.wholesale.toolkit.javaapi.WSPResponse

The NSIWholesaleAPI class constructs an instance of a new NSIWholesaleAPI object whose methods can be called to perform Wholesale-related activities, such as connecting to the Wholesale System 16 over the Internet through a SSL, and it allows the computer application program 12 to create and manage Internet domain names. The class definition for NSIWholesaleAPI includes the following:

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NSIWholesaleAPI()

Method Summary

ł	wspkesponse	reatebusinessAccount (String acompanyName,					
		String aCompanyType, String aAddress1, String aCity,					
į		String aCountryCode, String aPhone, String aCustomerPassword,					
ĺ		String aAuthQuestion, String aAuthAnswer,					
I		String aLegalContactFirstName, String aLegalContactLastName)					
I		This method creates a business customer account and returns					
l		an automatically generated customer account id.					
I	WSPResponse	createBusinessAccount(String aCompanyName,					

String aCompanyType, String aAddress1, String aCity, String aCountryCode, String aPhone, String aCustomerPassword,

	String aAuthQuestion, String aAuthAnswer, String aLegalContactFirstName, String aLegalContactLastName, Properties optionalAttributes) This method creates a business customer account and returns an automatically generated customer account id.
WSPResponse	<pre>createBusinessAccount(String aCompanyName, String aCompanyType, String aAddress1, String aCity, String aCountryCode, String aPhone, String aCustomerPassword, String aAuthQuestion, String aAuthAnswer, String aLegalContactFirstName, String aLegalContactLastName,</pre>
	String aState, String aPostalCode) This method creates a business customer account and returns an automatically generated customer account id.
WSPResponse	createBusinessAccount (String aCompanyName, String aCompanyType, String aAddress1, String aCity, String aCountryCode, String aPhone, String aCustomerPassword, String aAuthQuestion, String aAuthAnswer, String aLegalContactFirstName, String aLegalContactLastName, String aState, String aPostalCode, Properties optionalAttributes) This method creates a business customer account and returns an automatically generated customer account id.
WSPResponse	
WSPResponse :	createDnsHosting(String pCustomerAccountId, String pCustomerPassword, String aDomainName, Properties optionalAttributes) This method registers a DNS Hosting product for an existing customer account.
<u>WSPResponse</u>	<pre>createDomain(String pCustomerAccountId, String pCustomerPassword, String aDomainName, String aHostId1, String aHostId2, String aTechContactId) This method registers a new domain product for an existing customer account.</pre>
WSPResponse	createDomain(String pCustomerAccountId, String pCustomerPassword, String aDomainName, String aHostId1, String aHostId2, String aTechContactId, Properties optionalAttributes) This method registers a new domain product for an existing customer account.
<u>WSPResponse</u>	createDomain(String pCustomerAccountId, String pCustomerPassword, String aDomainName, String aHostName1, String aHostAddr1, String aHostName2, String aHostAddr2, String aTechContactId) This method registers a new domain product for an existing customer account.

MODD						
WSPResponse	String pCustomerPassword, String aDomainName,					
	String aHostNamel, String aHostAddrl, String aHostName2,					
,	String aHostAddr2, String aTechContactId,					
	Properties optionalAttributes) This mathed registers a new demain and at face					
	This method registers a new domain product for an existing					
	customer account.					
WSPResponse						
· .	String aAddress1, String aCountryCode, String aPhone,					
	String aCustomerPassword, String aAuthQuestion,					
	String aAuthAnswer, String aCity)					
	This method creates an individual customer account and returns					
	an automatically generated customer account id.					
WSPResponse						
	String aAddress1, String aCountryCode, String aPhone,					
	String aCustomerPassword, String aAuthQuestion,					
•	String aAuthAnswer, String aCity,					
	Properties optional Attributes)					
,	This method creates an individual customer account and returns					
	an automatically generated customer account id.					
WSPResponse						
	String aAddress1, String aCountryCode, String aPhone,					
	String aCustomerPassword, String aAuthQuestion,					
	String aAuthAnswer, String aCity, String aState,					
	String aPostalCode)					
	This method creates an individual customer account and returns					
	an automatically generated customer account id.					
WSPResponse						
1	String aAddress1, String aCountryCode, String aPhone,					
	String aCustomerPassword, String aAuthQuestion,					
	String aAuthAnswer, String aCity, String aState, String aPostalCode, Properties optionalAttributes)					
	This method creates an individual customer account and returns					
	an automatically generated customer account id.					
WSPResponse	(
	String aOrganization, String aAddress1, String aCountryCode,					
	String aPhone, String aEmail, String aTechContactPassword, String aCity)					
	This method creates a technical contact and returns an					
	automatically generated technical contact id (NIC Handle).					
WSPResponse						
	String aOrganization, String aAddress1, String aCountryCode,					
	String aPhone, String aEmail, String aTechContactPassword,					
	String aCity, Properties optionalAttributes)					
	This method creates a technical contact and returns an					
	automatically generated technical contact id (NIC Handle).					
WSPResponse						
	String aOrganization, String aAddress1, String aCountryCode,					
	String aPhone, String aEmail, String aTechContactPassword,					

	
	String aCity, String aState, String aPostalCode) This method creates a technical contact and returns an automatically generated technical contact id (NIC Handle).
<u>WSPResponse</u>	createTechnicalContact(String aFirstName, String aLastName, String aOrganization, String aAddressl, String aCountryCode, String aPhone, String aEmail, String aTechContactPassword, String aCity, String aState, String aPostalCode, Properties optionalAttributes) This method creates a technical contact and returns an automatically generated technical contact id (NIC Handle).
WSPResponse	describe (String pTarget) This method provides information about a specified target.
WSPResponse	describe (String prarget, Properties optionalAttributes) This method provides information about a specified target.
WSPResponse	generateDomainName (String pKeyWords) This method is used to generate a list of available domain names based on a specified list of keywords.
WSPResponse	generateDomainName (String pKeyWords, Properties optionalAttributes) This method is used to generate a list of available domain names based on a specified list of keywords.
static <u>String</u>	getJdkVersion () Static accessor method to get JDK version
static long	getSerialVersion() Static accessor method to get serial version
static double	getVersion() Static accessor method to get release version
WSPResponse	This method returns basic information about the supported protocol commands and classes.
WSPResponse	help (Properties optional Attributes) This method returns basic information about the supported protocol commands and classes.
static void	init (Properties properties) Initializes the Wholesale Services Protocol API.
static void	init (String configFileName) Initializes the Wholesale Services Protocol API.
	Retrieves a list of all business customer accounts linked to wholesaler.
WSPResponse	lookupBusinessAccount (Properties optionalAttributes) Retrieves a list of all business customer accounts linked to wholesaler.

WSPResponse	lookupBusinessAccount(String pCustomerAccountId, String pCustomerPassword)
	Retrieves details of a specific business customer account.
WSPResponse	lookupBusinessAccount(String pCustomerAccountId, String pCustomerPassword, Properties optionalAttributes) Retrieves details of a specific business customer account.
WSPResponse	lookupDnsHosting (String pCustomerAccountId, String pCustomerPassword) Retrieves a list of all domain names associated with DNS Hosting products owned by customer.
WSPResponse	lookupDnsHosting (String pCustomerAccountId, String pCustomerPassword, Properties optionalAttributes) Retrieves a list of all domain names associated with DNS Hosting products owned by customer.
WSPResponse	lookupDnsHosting (String pCustomerAccountId, String pCustomerPassword, String pDomainName) Retrieves details of a specific DNS Hosting product owned by customer.
WSPResponse	lookupDnsHosting (String pCustomerAccountId, String pCustomerPassword, String pDomainName, Properties optionalAttributes) Retrieves details of a specific DNS Hosting product owned by customer.
WSPResponse	lookupDomain (String pCustomerAccountId, String pCustomerPassword) Retrieves a list of all domain products owned by customer.
WSPResponse	lookupDomain(String pCustomerAccountId, String pCustomerPassword, Properties optionalAttributes) Retrieves a list of all domain products owned by customer.
WSPResponse	lookupDomain (String pCustomerAccountId, String pCustomerPassword, String pDomainName) Retrieves detail information about a specific domain product registered to a customer.
WSPResponse	lookupDomain(String pCustomerAccountId, String pCustomerPassword, String pDomainName, Properties optionalAttributes) Retrieves detail information about a specific domain product registered to a customer.
WSPResponse	lookupDomainByTechContact(String pCustomerAccountId, String pTechContactId, String pTechContactPassword) Retrieves a list of the customer's domain products for which the technical contact id is the technical contact.
WSPResponse	lookupDomainByTechContact(String pCustomerAccountId, String pTechContactId, String pTechContactPassword, Properties optionalAttributes) Retrieves a list of the customer's domain products for which the
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	technical contact id is the technical contact.
WSPResponse	lookupDomainByTechContact(String pCustomerAccountId, String pTechContactId, String pTechContactPassword, String pDomainName) Retrieves details of a specific domain product owned by customer, for which the technical contact id is the technical contact for the specific product.
WSPResponse	String pTechContactId, String pTechContactPassword, String pDomainName, Properties optionalAttributes) Retrieves details of a specific domain product owned by customer, for which the technical contact id is the technical contact for the specific product.
WSPResponse	<u>lookupIndividualAccount()</u> Retrieves a list of all individual accounts linked to a wholesaler.
WSPResponse	lookupIndividualAccount (Properties optionalAttributes) Retrieves a list of all individual accounts linked to a wholesaler.
WSPResponse	100kupIndividualAccount (String pCustomerAccountId, String pCustomerPassword) Retrieves details of a specific individual customer account.
WSPResponse	lookupIndividualAccount(String pCustomerAccountId, String pCustomerPassword, Properties optionalAttributes) Retrieves details of a specific individual customer account.
WSPResponse	<u>lookupTechnicalContact(String pTechContactId)</u> Retrieves details of a specific technical contact.
WSPResponse	<u>lookupTechnicalContact(String pTechContactId, Properties</u> optionalAttributes) Retrieves details of a specific technical contact.
WSPResponse	modifyBusinessAccount (String pCustomerAccountId, String pCustomerPassword) This method is used to modify one or more attributes of an existing business (organization) customer account.
	modifyBusinessAccount (String pCustomerAccountId, String pCustomerPassword, Properties optionalAttributes) This method is used to modify one or more attributes of an existing business (organization) customer account.
<u>WSPResponse</u>	modifyDomain (String pCustomerAccountId, String pIspPassword, String pDomainName, String aTechContactId) This method allows an Internet Service Provider (ISP) to modify the Technical Contact Id of a specific domain product.
<u>WSPResponse</u>	modifyDomain (String pCustomerAccountId, String pIspPassword, String pDomainName, String aTechContactId, Properties optionalAttributes) This method allows an Internet Service Provider (ISP) to modify the Technical Contact Id of a specific domain product.

Sign	modifyDomain (String pCustomerAccountId, String pCustomerPassword, String pDomainName, String aHostId1, String aHostId2, String aTechContactId) This method allows a customer to modify one or more attributes associated with a specific instance of a Domain product registered to that customer.
Sisi F a t	modifyDomain (String pCustomerAccountId, String pCustomerPassword, String pDomainName, String aHostId1, String aHostId2, String aTechContactId, Properties optionalAttributes) This method allows a customer to modify one or more attributes associated with a specific instance of a Domain product registered to that customer.
	modifyDomain (String pCustomerAccountId, String pTechContactId, String pTechContactPassword, String pDomainName, String aHostId1, String aHostId2, String aTechContactId) This method allows a technical contact of a customer's domain product to modify one or more attributes associated with that specific instance of the Domain product registered to that customer.
	modifyDomain (String pCustomerAccountId, String pTechContactId, String pTechContactPassword, String pDomainName, String aHostId1, String aHostId2, String aTechContactId, Properties optionalAttributes) This method allows a technical contact of a customer's domain product to modify one or more attributes associated with that specific instance of the Domain product registered to that customer.
S S S S	modifyDomain (String pCustomerAccountId, String pCustomerPassword, String pDomainName, String aHostName1, String aHostAddr1, String aHostName2, String aHostAddr2, String aTechContactId) This method allows a customer to modify one or more attributes associated with a specific instance of a Domain product registered to that customer.
S S S P P	modifyDomain (String pCustomerAccountId, String pCustomerPassword, String pDomainName, String aHostName1, String aHostAddr1, String aHostName2, String aHostAddr2, String aTechContactId, Properties optionalAttributes) This method allows a customer to modify one or more attributes associated with a specific instance of a Domain product registered to that customer.
<u> S</u> <u>S</u> <u>S</u>	nodifyDomain (String pCustomerAccountId, String pTechContactId, String pTechContactPassword, String pDomainName, String aHostName1, String aHostName2, String aHostAddr1, String aHostName2, String aHostAddr2, String aTechContactId) This method allows a technical contact of a customer's domain product to modify one or more attributes associated with that specific

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	WSPResponse	<pre>modifyDomain(String pCustomerAccountId, String pTechContactId, String pTechContactPassword, String pDomainName, String aHostName1, String aHostAddrl, String aHostName2,</pre>
		String aHostAddr2, String aTechContactId, Properties optionalAttributes)
	·	This method allows a technical contact of a customer's domain product to modify one or more attributes associated with that specific
L		instance of the Domain product registered to that customer.
	WSPResponse	modifyIndividualAccount(String pCustomerAccountId, String pCustomerPassword)
		This method is used to modify one or more attributes of an existing individual customer account.
ſ	WSPResponse	modifyIndividualAccount(String pCustomerAccountId, String pCustomerPassword, Properties optionalAttributes)
		This method is used to modify one or more attributes of an existing individual customer account.
	WSPResponse	<pre>modifyPassword(String pCustomerAccountId, String aCustomerPassword)</pre>
		This method is used to modify/reset a customer's account password.
ſ	WSPResponse	<pre>modifyPassword(String pCustomerAccountId, String aCustomerPassword, Properties optionalAttributes)</pre>
		This method is used to modify/reset a customer's account password.
	WSPResponse	<pre>modifyTechnicalContact(String pTechContactId, String pTechContactPassword)</pre>
		This method is used to modify one or more attributes of an existing technical contact.
	WSPResponse	<pre>modifyTechnicalContact(String pTechContactId, String pTechContactPassword, Properties optionalAttributes)</pre>
		This method is used to modify one or more attributes of an existing technical contact.
	WSPResponse	
		This method terminates the wholesaler's access to session commands.
	WSPResponse	quit (Properties optional Attributes)
		This method terminates the wholesaler's access to session commands.
	yoid	<u>shutdown ()</u> This method shutsdown the Wholesaler Services Protocol API.
	WSPResponse	verifyDomainName (String pDomainName) This method verifies whether or not a specified domain name is available.
	WSPResponse	<pre>verifyDomainName(String pDomainName, Properties optionalAttributes)</pre>

	This method verifies whether or not a specified domain name is available.
WSPResponse	verifyDomains (String pDomainTarget) This method verifies if series of domains are available.
WSPResponse	verifyDomains (String pDomainTarget, Properties optionalAttributes) This method verifies if series of domains are available.
<u>WSPResponse</u>	verifyPassword (String pCustomerAccountId, String pCustomerPassword) This method verifies whether or not a specified customer account id and password are valid.
WSPResponse	verifyPassword(String pCustomerAccountId, String pCustomerPassword, Properties optionalAttributes) This method verifies whether or not a specified customer account id and password are valid.

Methods inherited from class java.lang. <u>Object</u>								
equals,	getClass,	<u>hashCode</u> ,	notify,	<pre>notifyAll,</pre>	toString,	<u>wait</u> ,	wait,	<u>wait</u>

The WSPResponse class represents the various components of a WSP response. A WSPResponse will be returned for command request that are issued through the application program interface 14. The response will describe, in as much detail as possible, the result of the issued request, and will optionally include any additional information that was generated by the request. A result consists of a "result code" followed by a descriptive "result message." The result code consists of a major result code followed by a period ('.'), followed by a minor result code.

The three-digit major result code provides a general indication of the success or failure of an issued request. In most cases, one or more result properties are returned. The three-digit minor result code may provide additional information about the major result code. Each command request has its own set of minor result code values or may have the value (000). The WSPResponse and the result code are described in more detail in the aforementioned copending U.S. Patent Application Serial No. 09/544,305. A result property consists of a property key

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followed by a colon (':'), followed by a property value. In some results, plain text is returned (e.g. information returned from the Help command). The result property is described in more detail in the aforementioned copending U.S. Patent Application Serial No. 09/544,305. The class definition for WSPResponse includes the following:

Constructor Summary

WSPResponse (String data)

Parses a WSP text response and extracts and stores the various components.

Method Summa	ry				
static void	displayResponse (WSPResponse response) prints debug-type representation of the WSP Response to standard output				
static <u>String</u>	getJdkVersion () Static accessor method to get JDK version				
int	getMajorResultCode() returns the WSP response major result code				
int	getMinorResultCode() returns the WSP response minor result code				
Properties	getProperties() Returns a property list containing all result property specifications, if applicable, extracted from the original WSP text response.				
static <u>Properties</u>	getProperties (WSPResponse wspResponse) Returns a property list containing all result property specifications, if applicable, extracted from the original WSP text response.				
<u>String</u>	getProperty (String resultPropertyKey) returns the result property value corresponding to the specified result property key, if found, extracted from the original WSP text response.				
String	getRawResponse() Returns the original WSP text response string used to instantiate object.				
String	getResultCode() returns the WSP response result code				
String	getResultCodeAndMessage()				

	returns the WSP response result code and result message
String	getResultMessage() Returns the result message extracted from the original WSP text response.
static long	getSerialversion() Static accessor method to get serial version
<u>Vector</u>	returns a vector containing lines of text returned in the WSP response.
static double	getversion() Static accessor method to get release version
String	tostring() returns the raw WSP response

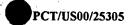
Methods inherited from class java.lang.Object										
equals,	<pre>getClass,</pre>	<u>hashCode</u> ,	notify,	<pre>notifyAll,</pre>	wait,	<u>wait</u> ,	wait			

The NSIWholesaleException class is a user-defined exception class denoting a special error thrown by the methods in the class NSIWholesaleAPI. In particular, exceptions of the class NSIWholesaleException are thrown (a) when class initialization fails; (b) when a method in NSIWholesaleAPI is called without successfully initializing the class; (c) when a command cannot be completed (for example due to communications problems); or (d) to reframe an NSIException thrown at a lower level to give additional context information.

The class WSPException is the parent for wholesale protocol exception classes which processes responses sent by Wholesale Server 16 to computer application program 12. This is a service class, not used explicitly. It furnishes the base methods for storing error information common to all exception classes.

The classes InvalidArgumentException and InvalidResponseFormatException are the detail class children of WSPException. Both methods have the same internal functionality as

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WSPExcepton. In addition, both classes are independent, so that methods receiving the thrown exceptions know the type of error detected, even if the error context information is identical. In particular, the WSPResponse class throws InvalidArgumentException if the data returned by Wholesale Server 16 as part of a command, is invalid. The WSPResponse class throws class InvalidResponseFormatException if the data returned by the Wholesale Server 16 as part of a command, is not properly formatted. The class definition for NSIWholesaleException includes the following:

Constructor Summary	
NSIWholesaleException()	
NSIWholesaleException(String message)	·
NSIWholesaleException(String message, Throwable throwable)	
NSIWholesaleException (Throwable throwable)	

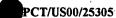
Method Sun	nmary
static String	getJdkVersion() Static accessor method to get JDK version
static long	getSerialVersion() Static accessor method to get serial version
static double	getversion () Static accessor method to get release version
String	toString()

Methods inherited from class java.lang.Throwable

fillInStackTrace, getLocalizedMessage, getMessage, printStackTrace,
printStackTrace, printStackTrace

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Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, wait, wait, wait

The class definition for WSPException includes the following:

WSPException() WSPException(String message) WSPException(String message, Throwable x)

Method Sum	nmary
static String	getJdkversion() Static accessor method to get JDK version
String	getMessage()
static long	getSerialVersion() Static accessor method to get serial version
static double	getversion() Static accessor method to get release version

Methods inherited from class java.lang.Throwable

fillInStackTrace, getLocalizedMessage, printStackTrace, printStackTrace, toString

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, wait, wait, wait

The class definition for InvalidArgumentException is as follows:

Constructor Summary

InvalidArgumentException()

InvalidArgumentException(String message)

InvalidArgumentException(String message, Throwable x)

Method Sun	nmary	
static String	getJdkversion() Static accessor method to get JDK version	
String	getMessage ()	
static long	getSerialVersion() Static accessor method to get serial version	
static double	getversion() Static accessor method to get release version	

Methods inherited from class java.lang.Throwable

fillInStackTrace, getLocalizedMessage, printStackTrace, printStackTrace, toString

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, wait, wait, wait

The class definition for InvalidResponseFormatException includes the following:

Constructor Summary

5

InvalidResponseFormatException()

InvalidResponseFormatException(String message)

InvalidResponseFormatException(String message, Throwable x)

Method Summary

static String getJdkVersion()

	Static accessor method to get JDK version
String	getMessage()
static long	getSerialVersion() Static accessor method to get serial version
static double	getversion() Static accessor method to get release version

Methods inherited from class java.lang. Throwable

fillInStackTrace, getLocalizedMessage, printStackTrace, printStackTrace, toString

Methods inherited from class java.lang.Object equals, getClass, hashCode, notify, notifyAll, wait, wait, wait

The invention will be further clarified by the following example showing a computer program file for creating a session with a Wholesale system to begin Wholesale operation, which is intended to be purely exemplary of the invention.

10

```
NSIWholesaleAPI.init("WSPjavaAPI.conf");
catch (NSIWholesaleException e)
System.out.print("Unable to initialize NSI Wholesale API: " + e);
System.exit(1);
//Having initialized the NSI Wholesale API, we now need to
// create an instance of the API by calling constructor NSIWholesaleAPI()
api = new NSIWholesaleAPI();
catch (NSIWholesaleException e)
System.out.print("Unable to initialize NSI Wholesale API: " + e)
System.exit(1);
// At this point, if no error has been thrown, then the session
// is established, and a number of connections have been opened
// in the connection pool.
// Here, the call to methods on "api" are used to perform
// wholesale related activities. For this use case,
// there are none.
// End the session. This is done by calling the shutdown method on the
// instance of the wholesale API that was created earlier.
api.shutdown();
```

The WSP Java API 14 is an implementation of the WSP. In every case where the WSP Java API 14 is used, the first steps are to initialize a session and then create an instance of the class to reference the methods. Individual calls to methods are instances of a single protocol exchange. Each call contains all necessary information (e.g., customer identification, contact information). Except for session information, no information carries over from method to method.

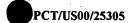
As the example shows, the first evocation of a routine in the WSP Java API 14 is to the class method NSIWholesaleAPI init to initialize the interface to the Wholesale System 16. The second evocation, creates an instance of the class NSIWholesaleAPI, which makes available to the application program 12 the methods to send commands to the Wholesale System 16. The application program 12 can now send command requests to the application program interface 14.

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The last evocation is to the shutdown method, which ends the session with the Wholesale System 16.

It is to be noted that in the above description, references to Network Solutions, Inc. and NSI, including but not limited to references which are imbedded in the examples given of classes, methods, constructors, drawings, and the like, are intended to be exemplary only and not restricted to any particular implementation.

While the foregoing description is based on a client-server architecture, those skilled in the art will recognize that other types of architecture may be used consistent with the invention. In addition, while the foregoing description is based on a software implementation, other - implementations may be used consistent with the invention. Further, while the foregoing description is based on the Java language, those skilled in the art will recognize that other types of language may be used consistent with the invention. Therefore, it is intended that this invention not be limited to the particular implementation and method disclosed herein, but that the invention include all implementations falling within the scope of the appended claims.

The foregoing description is presented for illustration and explanation. It is not intended to be exhaustive or to limit the invention to the precise form disclosed, and modifications of variations are possible in light of the above teachings or may be acquired from practice of the invention. The principles of the invention and its practical application enable one skilled in the art to utilize the invention in various embodiments and with various modifications as are suited to the use contemplated.

The class definition for	NSIWholes	aleAP	I is as follows	3:	 • • • • • •
7					 · · · .
/ Package			^		
ackage nsi wholesale too	olkit java	api:			

```
//-----
        // Imports...
        //----
                      -----
 5
        import java.io.LineNumberReader;
        import java.io.FileReader;
        import java.io.IOException;
        import java.io.FileNotFoundException;
        import java.util.StringTokenizer;
10
        import java.util.Properties;
        import java.util.Enumeration;
        import java.util.NoSuchElementException;
        import nsi.wholesale.toolkit.javaapi.util.resourcepool.Resource;
        import nsi.wholesale.toolkit.javaapi.util.resourcepool.ResourceException;
15
         *----- Copyright (c) 2000 Network Solutions, Inc
20
        * This Java-based Wholesale Services Protocol (WSP) API provides
        * programmer access to the Wholesale Services Protocol Server.
        * The Wholesale Services Protocol (WSP) is a simple, connection-based,
        * ASCII text-based protocol. It allows wholesalers to securely and
25 ·
        * reliably create, modify, and lookup customer accounts and various
        * products via a single client/server interface.
        *<BR>-----
30
        *<BR>-----
        <BR>
        */
35
       public class NSIWholesaleAPI
       //-----
       // Beginning of Required/Standard Fields
       //-----
40
            /** Serial Version */
            static long serialVersion = 1L;
            /** Release Version */
            static double version = 1.1D;
45
             /** SCCS control ID */
             static final String sccsID = "@(#) wholesale-sdk d1.12.1.3 08/04/00
       10:27:19 NSIWholesaleAPI.java NSI";
50
             /** JDK Version */
           static String jdkVersion = "1.1.7";
            // Static Accessor Method(s)...
            /** Static accessor method to get serial version */
55
            static public long getSerialVersion() { return serialVersion; }
            /** Static accessor method to get release version */
```

```
static public double getVersion() { return version; }
              /** Static accessor method to get JDK version */
              static public String getJdkVersion() { return jdkVersion; }
 5
                // End of Required/Standard Fields
        //-----
10
        // class (static) variable(s) ...
              /** The name of this class */
              private static final String className = "NSIWholesaleAPI";
15
              /** Connection pool */
             protected static NSIWholesalePool pool = null;
              /** Retry count */
             protected static int retry = 1;
20
              // Supported Commands
              /** Ease-of-use constant for Command: Session */
             public static final String COMMAND_SESSION = "Session";
25
              /** Ease-of-use constant for Command: Describe */
             public static final String COMMAND DESCRIBE = "Describe";
              /** Ease-of-use constant for Command: Verify */
             public static final String COMMAND VERIFY = "Verify";
              /** Ease-of-use constant for Command: Create */
30
             public static final String COMMAND CREATE = "Create";
              /** Ease-of-use constant for Command: Delete */
             public static final String COMMAND DELETE = "Delete";
              /** Ease-of-use constant for Command: Modify */
             public static final String COMMAND MODIFY = "Modify";
35
              /** Ease-of-use constant for Command: Renew */
             public static final String COMMAND RENEW = "Renew";
              /** Ease-of-use constant for Command: Generate */
             public static final String COMMAND_GENERATE = "Generate";
              /** Ease-of-use constant for Command: Lookup */
40
             public static final String COMMAND LOOKUP = "Lookup";
             /** Ease-of-use constant for Command: Help */
             public static final String COMMAND HELP = "Help";
             /** Ease-of-use constant for Command: Quit */
             public static final String COMMAND QUIT = "Quit";
45
             // Supported Classes
             //-----
             /** Ease-of-use constant for Class: DomainName */
             public static final String CLASS_DOMAIN_NAME = "DomainName";
50
             /** Ease-of-use constant for Class: Domains */
             public static final String CLASS_DOMAINS = "Domains";
             /** Ease-of-use constant for Class: Password */
             public static final String CLASS PASSWORD = "Password";
             /** Ease-of-use constant for Class: IndividualAccount */
55
             public static final String CLASS INDIVIDUAL ACCOUNT =
        "IndividualAccount";
             /** Ease-of-use constant for Class: BusinessAccount */
```

```
public static final String CLASS_BUSINESS_ACCOUNT = "BusinessAccount":
               /** Ease-of-use constant for Class: TechnicalContact */
               public static final String CLASS_TECHNICAL_CONTACT = "TechnicalContact";
               /** Ease-of-use constant for Class: Domain */
 5
               public static final String CLASS_DOMAIN = "Domain";
               /** Ease-of-use constant for Class: DnsHosting */
               public static final String CLASS_DNS_HOSTING = "DnsHosting";
               // Supported Command-Class Combinations
10
               //----
               /** Ease-of-use constant for Command-Class Combination: VerifyDomainName
               public static final String COMBO_VERIFY_DOMAIN_NAME = COMMAND_VERIFY + "
         " + CLASS_DOMAIN_NAME;
15
               /** Ease-of-use constant for Command-Class Combination: Verify Domains
               public static final String COMBO_VERIFY_DOMAINS = COMMAND_VERIFY + " " +
         CLASS DOMAINS;
               /** Ease-of-use constant for Command-Class Combination: Verify Password
20
               public static final String COMBO_VERIFY_PASSWORD = COMMAND_VERIFY + " "
         + CLASS PASSWORD;
               /** Ease-of-use constant for Command-Class Combination: Create
25
         IndividualAccount */
               public static final String COMBO_CREATE_INDIVIDUAL_ACCOUNT =
         COMMAND_CREATE + " " + CLASS_INDIVIDUAL_ACCOUNT;
               /** Ease-of-use constant for Command-Class Combination: Create
         BusinessAccount */
30
               public static final String COMBO CREATE BUSINESS ACCOUNT =
         COMMAND_CREATE + " " + CLASS BUSINESS ACCOUNT;
               /** Ease-of-use constant for Command-Class Combination: Create
         TechnicalContact */
               public static final String COMBO_CREATE_TECHNICAL CONTACT =
35
         COMMAND CREATE + " " + CLASS_TECHNICAL_CONTACT;
               /** Ease-of-use constant for Command-Class Combination: Create Domain */
               public static final String COMBO_CREATE_DOMAIN = COMMAND_CREATE + " " +
               /** Ease-of-use constant for Command-Class Combination: Create
40
         DnsHosting */
               public static final String COMBO_CREATE_DNS_HOSTING = COMMAND CREATE + "
         " + CLASS DNS HOSTING;
               /** Ease-of-use constant for Command-Class Combination: Delete Domain */
45
               public static final String COMBO_DELETE_DOMAIN = COMMAND_DELETE + " "
         CLASS DOMAIN;
               /** Ease-of-use constant for Command-Class Combination: Delete
         DnsHosting */
               public static final String COMBO_DELETE_DNS_HOSTING = COMMAND DELETE + "
50
         " + CLASS_DNS_HOSTING;
               /** Ease-of-use constant for Command-Class Combination: Delete
         IndividualAccount */
               public static final String COMBO_DELETE_INDIVIDUAL ACCOUNT =
         COMMAND_DELETE + " " + CLASS_INDIVIDUAL_ACCOUNT;
55
               /** Ease-of-use constant for Command-Class Combination: Delete
         BusinessAccount */
```

```
/** Ease-of-use constant for Command-Class Combination: Modify Domain */
               public static final String COMBO_MODIFY_DOMAIN = COMMAND_MODIFY + " " +
         CLASS DOMAIN;
               /** Ease-of-use constant for Command-Class Combination: Modify
         IndividualAccount */
               public static final String COMBO MODIFY INDIVIDUAL ACCOUNT =
10
         COMMAND_MODIFY + " " + CLASS INDIVIDUAL ACCOUNT;
               /** Ease-of-use constant for Command-Class Combination: Modify
         BusinessAccount */
               public static final String COMBO_MODIFY_BUSINESS ACCOUNT =
         COMMAND MODIFY + " " + CLASS BUSINESS ACCOUNT;
15
               /** Ease-of-use constant for Command-Class Combination: Modify
         TechnicalContact */
               public static final String COMBO_MODIFY_TECHNICAL CONTACT =
         COMMAND_MODIFY + " " + CLASS TECHNICAL CONTACT;
               /** Ease-of-use constant for Command-Class Combination: Modify Password
20
               public static final String COMBO_MODIFY_PASSWORD = COMMAND MODIFY + " "
         + CLASS_PASSWORD;
               /** Ease-of-use constant for Command-Class Combination: Renew Domain */
               public static final String COMBO_RENEW_DOMAIN = COMMAND_RENEW + " " +
25
         CLASS_DOMAIN;
               /** Ease-of-use constant for Command-Class Combination: Renew DnsHosting
               public static final String COMBO_RENEW_DNS_HOSTING = COMMAND_RENEW + " "
30
         + CLASS_DNS HOSTING;
               /** Ease-of-use constant for Command-Class Combination: Generate
         DomainName */
               public static final String COMBO_GENERATE_DOMAIN_NAME = COMMAND GENERATE
35
         + " " + CLASS_DOMAIN_NAME;
               /** Ease-of-use constant for Command-Class Combination: Lookup Domain */
               public static final String COMBO_LOOKUP_DOMAIN = COMMAND_LOOKUP + " "
         CLASS DOMAIN;
40
               /** Ease-of-use constant for Command-Class Combination: Lookup
         DnsHosting */
               public static final String COMBO_LOOKUP_DNS_HOSTING = COMMAND_LOOKUP + "
           + CLASS DNS HOSTING;
               /** Ease-of-use constant for Command-Class Combination: Lookup
45
         IndividualAccount */
               public static final String COMBO LOOKUP INDIVIDUAL ACCOUNT =
         COMMAND LOOKUP + " " + CLASS INDIVIDUAL ACCOUNT;
               /** Ease-of-use constant for Command-Class Combination: Lookup
         BusinessAccount */
50
               public static final String COMBO LOOKUP BUSINESS ACCOUNT =
         COMMAND LOOKUP + " " + CLASS BUSINESS ACCOUNT;
               /** Ease-of-use constant for Command-Class Combination: Lookup
         TechnicalContact */
               public static final String COMBO_LOOKUP_TECHNICAL CONTACT =
55
         COMMAND LOOKUP + " " + CLASS TECHNICAL CONTACT;
```

public static final String COMBO_DELETE_BUSINESS_ACCOUNT =

COMMAND_DELETE + " " + CLASS BUSINESS ACCOUNT;

// Supported Attributes

```
/** Ease-of-use constant for Attribute Key: FirstName */
               public static final String ATTR FIRST_NAME = "FirstName";
               /** Ease-of-use constant for Attribute Key: LastName */
 5
               public static final String ATTR LAST NAME = "LastName";
               /** Ease-of-use constant for Attribute Key: Address1 */
               public static final String ATTR ADDRESS1 = "Address1";
               /** Ease-of-use constant for Attribute Key: Address2 */
               public static final String ATTR ADDRESS2 = "Address2";
10
               /** Ease-of-use constant for Attribute Key: Address3 */
               public static final String ATTR ADDRESS3 = "Address3";
               /** Ease-of-use constant for Attribute Key: Address4 */
               public static final String ATTR_ADDRESS4 = "Address4";
               /** Ease-of-use constant for Attribute Key: Address5 */
15
               public static final String ATTR_ADDRESS5 = "Address5";
               /** Ease-of-use constant for Attribute Key: City */
               public static final String ATTR_CITY = "City";
               /** Ease-of-use constant for Attribute Key: State */
               public static final String ATTR_STATE = "State";
20
               /** Ease-of-use constant for Attribute Key: PostalCode */
               public static final String ATTR_POSTAL_CODE = "PostalCode";
               /** Ease-of-use constant for Attribute Key: CountryCode */
               public static final String ATTR_COUNTRY_CODE = "CountryCode";
               /** Ease-of-use constant for Attribute Key: Phone */
25
               public static final String ATTR_PHONE = "Phone";
               /** Ease-of-use constant for Attribute Key: Fax */
               public static final String ATTR_FAX = "Fax";
               /** Ease-of-use constant for Attribute Key: Email */
               public static final String ATTR_EMAIL = "Email";
               /** Ease-of-use constant for Attribute Key: CustomerAccountId */
30
               public static final String ATTR_CUSTOMER ACCOUNT ID =
         "CustomerAccountId";
               /** Ease-of-use constant for Attribute Key: CustomerPassword */
               public static final String ATTR_CUSTOMER_PASSWORD = "CustomerPassword";
35
               /** Ease-of-use constant for Attribute Key: AuthQuestion */
               public static final String ATTR_AUTH_QUESTION = "AuthQuestion";
               /** Ease-of-use constant for Attribute Key: AuthAnswer */
               public static final String ATTR_AUTH_ANSWER = "AuthAnswer";
               /** Ease-of-use constant for Attribute Key: CompanyName */
40
               public static final String ATTR_COMPANY_NAME = "CompanyName";
               /** Ease-of-use constant for Attribute Key: CompanyType */
               public static final String ATTR_COMPANY_TYPE = "CompanyType";
               /** Ease-of-use constant for Attribute Key: LegalContactFirstName */
               public static final String ATTR_LEGAL_CONTACT_FIRST_NAME =
45
         "LegalContactFirstName";
               /** Ease-of-use constant for Attribute Key: LegalContactLastName */
               public static final String ATTR LEGAL CONTACT LAST NAME =
         "LegalContactLastName";
               /** Ease-of-use constant for Attribute Key: LegalContactAddress1 */
50
               public static final String ATTR_LEGAL_CONTACT_ADDRESS1 =
         "LegalContactAddress1";
               /** Ease-of-use constant for Attribute Key: LegalContactAddress2 */
               public static final String ATTR_LEGAL_CONTACT_ADDRESS2 =
55
               /** Ease-of-use constant for Attribute Key: LegalContactAddress3 */
               public static final String ATTR_LEGAL_CONTACT ADDRESS3 =
         "LegalContactAddress3";
```

```
/** Ease-of-use constant for Attribute Key: LegalContactAddress4 */
               public static final String ATTR_LEGAL_CONTACT_ADDRESS4 =
         "LegalContactAddress4";
               /** Ease-of-use constant for Attribute Key: LegalContactAddress5 */
               public static final String ATTR_LEGAL CONTACT ADDRESS5 =
         "LegalContactAddress5";
               /** Ease-of-use constant for Attribute Key: LegalContactCity */
               public static final String ATTR_LEGAL_CONTACT_CITY = "LegalContactCity";
               /** Ease-of-use constant for Attribute Key: LegalContactState */
10
               public static final String ATTR LEGAL CONTACT STATE =
         "LegalContactState";
               /** Ease-of-use constant for Attribute Key: LegalContactPostalCode */
               public static final String ATTR_LEGAL_CONTACT_POSTAL CODE =
         "LegalContactPostalCode";
15
               /** Ease-of-use constant for Attribute Key: LegalContactCountryCode */
               public static final String ATTR_LEGAL_CONTACT_COUNTRY CODE =
         "LegalContactCountryCode";
               /** Ease-of-use constant for Attribute Key: LegalContactPhone */
               public static final String ATTR_LEGAL_CONTACT_PHONE =
20
         "LegalContactPhone";
               /** Ease-of-use constant for Attribute Key: LegalContactFax */
               public static final String ATTR_LEGAL CONTACT FAX = "LegalContactFax";
               /** Ease-of-use constant for Attribute Key: LegalContactEmail */
               public static final String ATTR_LEGAL_CONTACT_EMAIL =
25
         "LegalContactEmail";
               /** Ease-of-use constant for Attribute Key: Organization */
               public static final String ATTR_ORGANIZATION = "Organization";
               /** Ease-of-use constant for Attribute Key: TechContactPassword */
               public static final String ATTR_TECH_CONTACT_PASSWORD =
30
         "TechContactPassword";
               /** Ease-of-use constant for Attribute Key: DomainName */
               public static final String ATTR_DOMAIN_NAME = "DomainName";
               /** Ease-of-use constant for Attribute Key: HostNamel */
               public static final String ATTR_HOST_NAME1 = "HostName1";
35
               /** Ease-of-use constant for Attribute Key: HostAddr1 */
               public static final String ATTR HOST ADDR1 = "HostAddr1";
               /** Ease-of-use constant for Attribute Key: HostName2 */
               public static final String ATTR_HOST_NAME2 = "HostName2";
               /** Ease-of-use constant for Attribute Key: HostAddr2 */
40
               public static final String ATTR_HOST_ADDR2 = "HostAddr2";
               /** Ease-of-use constant for Attribute Key: HostId1 */
               public static final String ATTR_HOST_ID1 = "HostId1";
               /** Ease-of-use constant for Attribute Key: HostId2 */
              public static final String ATTR_HOST_ID2 = "HostId2";
45
               /** Ease-of-use constant for Attribute Key: TechContactId */
               public static final String ATTR_TECH_CONTACT ID = "TechContactId";
               /** Ease-of-use constant for Attribute Key: IspPassword */
               public static final String ATTR ISP PASSWORD = "IspPassword";
               /** Ease-of-use constant for Attribute Key: Protocol (returned by
50
        Describe) */
              public static final String ATTR_PROTOCOL = "Protocol";
               /** Ease-of-use constant for Attribute Key: Dns Hosting Created
         (returned by Create DnsHosting) */
              public static final String ATTR DNS HOSTING CREATED = "Dns Hosting
55
         Created";
```

```
/** Ease-of-use constant for Parameter Key: -WholesalerAccountId */
              public static final String PARM_WHOLESALER_ACCOUNT_ID = "-
         WholesalerAccountId";
               /** Ease-of-use constant for Parameter Key: -WholesalerPassword */
              public static final String PARM WHOLESALER_PASSWORD = "-
         WholesalerPassword";
               /** Ease-of-use constant for Parameter Key: -Target */
              public static final String PARM_TARGET = "-Target";
               /** Ease-of-use constant for Parameter Key: -DomainTarget */
10
              public static final String PARM_DOMAIN_TARGET = "-DomainTarget";
               /** Ease-of-use constant for Parameter Key: -KeyWords */
              public static final String PARM_KEY_WORDS = "-KeyWords";
               /** Ease-of-use constant for Parameter Key: -CustomerAccountId */
15
              public static final String PARM CUSTOMER ACCOUNT ID = "-" +
         ATTR_CUSTOMER_ACCOUNT_ID;
               /** Ease-of-use constant for Parameter Key: -CustomerPassword */
              public static final String PARM CUSTOMER PASSWORD = "-" +
         ATTR CUSTOMER PASSWORD;
20
              /** Ease-of-use constant for Parameter Key: -DomainName */
              public static final String PARM_DOMAIN_NAME = "-" + ATTR DOMAIN NAME;
               /** Ease-of-use constant for Parameter Key: -TechContactId */
              public static final String PARM_TECH_CONTACT_ID = "-" +
         ATTR_TECH_CONTACT_ID;
25
               /** Ease-of-use constant for Parameter Key: -TechContactPassword */
              public static final String PARM TECH CONTACT PASSWORD = "-" +
         ATTR_TECH_CONTACT_PASSWORD;
              /** Ease-of-use constant for Parameter Key: -IspPassword */
              public static final String PARM_ISP_PASSWORD = "-" + ATTR ISP PASSWORD;
30
         //----
         // class (static) method(s) ...
              /**
35
                * Initializes the Wholesale Services Protocol API.
                * @param String name of configuration files containing property list
                * @return void
40
                * @see NSIWholesaleAPI#init
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException if
         initialization fails
              public static void init(String configFileName)
45
              throws NSIWholesaleException {
                    System.out.println("NSIWholesaleAPI.init(String) started");
                     Properties configProps = new Properties();
                          LineNumberReader in = new LineNumberReader(new
50
        FileReader(configFileName));
                          String line = in.readLine();
                          while (line != null) {
                                line = line.trim();
                                if ( (line.length() > 0) && (line.startsWith("#") ==
55
         false) ) {
                                 ____try {
```

```
StringTokenizer st = new
         StringTokenizer(line, "=");
                                              String propertyKey = st.nextToken();
                                              String propertyValue = st.nextToken();
                                              configProps.put (propertyKey,
         propertyValue);
                                        catch (NoSuchElementException nsee) {
10
               System.err.println("NSIWholesaleAPI init(String): Error Reading Config
         File" + nsee);
                                              throw new NSIWholesaleException("Error
         reading Configuration File " + configFileName);
15
                                 line = in.readLine();
20
                     catch (FileNotFoundException fnfe) {
                           System.err.println("NSIWholesaleAPI.init(String):
         Configuration File Not Found " + fnfe);
                           throw new NSIWholesaleException("Configuration File Not
         Found " + configFileName);
25
                     catch (IOException ioe) {
                           System.err.println("NSIWholesaleAPI.init(String): IO
         Exception reading configuration file " + ioe);
                           throw new NSIWholesaleException("IO Exception reading
30
         configuration file " + configFileName);
                     catch (Exception e) {
                           System.err.println("NSIWholesaleAPI.init(String): Exception
         reading configuration file " + e);
35
                           throw new NSIWholesaleException ("Exception reading
         configuration file " + configFileName);
                     NSIWholesaleAPI.init(configProps);
40
                     System.out.println("NSIWholesaleAPI.init(String) completed
         successfully");
45
                * Initializes the Wholesale Services Protocol API.
                * <BR>
                * All of the following parameters should be
                * passed in through the properties file:
50
                     <PRE>
                           WholesaleAPI.minConnections -
                                 Connections to use on startup (1,2,5, 10)
                           WholesaleAPI.maxConnections -
                                 Maximum Connections (5,10,20)
55
                           WholesaleAPI.connectionSoTimeout - (Provided by NSI)
                                 Enable/disable Socket SO_TIMEOUT with the specified
         timeout, in milliseconds
```

```
WholesaleAPI.connectionProtocol - (Provided by NSI)
                                  Wholesale Services Protocol Version
                           WholesaleAPI.server - (Provided by NSI)
                                  The secure wholesale server at NSI
 5
                           WholesaleAPI.port - (Provided by NSI)
                                  The port on that machine
                           WholesaleAPI.retry -
                                 The retry count, if a transient error occurs (2.3)
10
                           WholesaleAPI.WholesalerAccountId - (Provided by NSI)
                                  The Wholesaler Account number
                           WholesaleAPI.WholesalerPassword - (Provided by NSI)
                                 The Password for that account
                     </PRE>
15
                * @param properties Properties file containing configuration settings
                * @return void
                * @see NSIWholesaleAPI#NSIWholesaleAPI
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException if
20
         initialization fails
               public static void init(Properties properties)
               throws NSIWholesaleException {
                     System.out.println("NSIWholesaleAPI.init(Properties) started");
25
                     int min = parseInt(
                           properties.getProperty("WholesaleAPI.minConnections"));
                     int max = parseInt(
                           properties.getProperty("WholesaleAPI.maxConnections"));
                     int connectionSoTimeout = parseInt(
30
                           properties.getProperty("WholesaleAPI.connectionSoTimeout"));
                     String connectionProtocol =
         properties.getProperty("WholesaleAPI.connectionProtocol");
                     String server = properties.getProperty("WholesaleAPI.server");
                     int port = parseInt(properties.getProperty("WholesaleAPI.port"));
35
                     retry = parseInt(properties.getProperty("WholesaleAPI.retry"));
                     String wholesalerAccountId =
                           properties.getProperty("WholesaleAPI.WholesalerAccountId");
                     String wholesalerPassword =
40
                           properties.getProperty("WholesaleAPI.WholesalerPassword");
                     System.out.println("connectionProtocol = " + connectionProtocol);
                     System.out.println("server = " + server);
45
                     System.out.println("port = " + port);
                     System.out.println("wholesalerAccountId = " +
         wholesalerAccountId);
                     System.out.println("wholesalerPassword = " + wholesalerPassword);
                     System.out.println("NSIWholesaleAPI.init(Properties) constructing
50
                     pool = new NSIWholesalePool(server, port, min, max,
                           wholesalerAccountId, wholesalerPassword, retry,
         connectionSoTimeout);
                     NSIWholesaleAPI api = new NSIWholesaleAPI();
55
                     if (api.verifyConnectionProtocol(connectionProtocol) != true)
                           api = null;
```

```
throw new NSIWholesaleException("Failed to verify connection
         protocol " + connectionProtocol);
                    api = null;
 5
                    System.out.println("NSIWholesaleAPI.init(Properties) completed
         successfully");
10
         // static initializer block ....
15
         // instance Variable(s) ...
         // Constructor(s).
20 .
                * Constructs a new NSIWholesaleAPI object. NSIWholesaleAPI MUST have
               * been initialized BEFORE any NSIWholesaleAPI objects can be
25
                * @see NSIWholesaleAPI#init
               * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException if
        NSIWholesaleAPI has not yet
               * been initialized
30
              public NSIWholesaleAPI() throws NSIWholesaleException {
                    if (pool == null)
                          throw new NSIWholesaleException("Must initialize API before
         use");
35
         // Accessors and Mutators
40
         // General Methods
         //#--BEGIN API------
45
                * This method is used to authenticate a wholesaler and to provide
               * the wholesaler with access to Session commands. Once a session
               * has been established, the Session command may not be issued
50
                * <BR><PRE>
                    Expected Major Result Code: SESSION CREATED
                * </PRE><BR>
                * @param pWholesalerAccountId the parameter value
55
                * @param pWholesalerPassword the parameter value
                * @return the Wholesale Server Protocol Server response
```

```
* @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                 * @see COMMAND_SESSION
                 * @see PARM_WHOLESALE_ACCOUNT_ID
                 * @see PARM WHOLESALE_PASSWORD
                 * @see WSPResponse#SESSION CREATED
                 * @see WSPResponse#AUTHENTICATION FAILED
10
               WSPResponse session(
                     String pWholesalerAccountId,
                     String pWholesalerPassword)
               throws NSIWholesaleException {
                     return session( pWholesalerAccountId, pWholesalerPassword, new
15
         Properties(), 0);
                  This method is used to authenticate a wholesaler and to provide
                 * the wholesaler with access to Session commands. Once a session
20
                  has been established, the Session command may not be issued
                 again
                  <BR><PRE>
                     Expected Major Result Code: SESSION CREATED
25
                 * @param pWholesalerAccountId the parameter value
                 * @param pWholesalerPassword the parameter value
                * @param optionalAttributes a property list of optional attributes
                 * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
30
         unable to complete command
                * @see COMMAND_SESSION
                * @see PARM_WHOLESALE_ACCOUNT_ID
                * @see PARM_WHOLESALE_PASSWORD
                * @see WSPResponse#SESSION_CREATED
35
                * @see WSPResponse#AUTHENTICATION FAILED
               WSPResponse session (
                     String pWholesalerAccountId,
40
                     String pWholesalerPassword,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return session (pWholesalerAccountId, pWholesalerPassword,
         optionalAttributes, 0);
45
               protected WSPResponse session(
                     String pWholesalerAccountId,
                     String pWholesalerPassword,
                     Properties optionalAttributes,
50
                     int count)
               throws NSIWholesaleException {
                     String methodName = className + ".session(String, String,
         Properties, int) ";
                     if (count > retry) {
55
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
```

```
WSPResponse returnCode;
                     try {
5
                           conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
10
                           allParmsAndAttrs.put(PARM_WHOLESALER_ACCOUNT ID,
         pWholesalerAccountId);
                           allParmsAndAttrs.put(PARM_WHOLESALER_PASSWORD,
         pWholesalerPassword);
15
                           returnCode = conn.makeRequest(COMMAND_SESSION,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
20
                     } catch (Exception e) {
                           try {
                                 pool.release(conn);
                           catch (ResourceException re) {
25
                                 System.err.println(methodName + "Caught
         ResourceException" + re);
                           finally {
                                 return session(
                                       pWholesalerAccountId,
30
                                       pWholesalerPassword,
                                       optionalAttributes,
                                       count + 1);
35
                * This method provides information about a specified target.
40
                * Currently, the only supported target is "Protocol".
                * This target tells Describe to return the current protocol version
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
45
                     Expected Result Property Key(s) Returned:
                           ATTR PROTOCOL
                * </PRE><BR>
                * @param pTarget the parameter value
                * @return the Wholesale Server Protocol Server response
50
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND DESCRIBE
                * @see NSIWholesaleAPI#PARM TARGET
                * @see NSIWholesaleAPI#ATTR PROTOCOL
55
                * @see
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
```

NSIWholesaleConnection conn = null;

```
*/
                public WSPResponse describe(String pTarget)
                throws NSIWholesaleException {
                     return describe(pTarget, new Properties(), 0);
 5
                 * This method provides information about a specified target.
                 * Currently, the only supported target is "Protocol".
                 * This target tells Describe to return the current protocol version
10
                 * <BR><PRE>
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                      Expected Result Property Key(s) Returned:
                           ATTR_PROTOCOL
15
                 * </PRE><BR>
                 * @param pTarget the parameter value
                 * @param optionalAttributes a property list of optional attributes
                 * @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
20
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND DESCRIBE
                 * @see NSIWholesaleAPI#PARM_TARGET
                 * @see NSIWholesaleAPI#ATTR_PROTOCOL
25
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
               public WSPResponse describe(String pTarget, Properties
         optionalAttributes)
30
               throws NSIWholesaleException {
                     return describe(pTarget, optionalAttributes, 0);
               protected WSPResponse describe(
                     String pTarget,
35
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
                     String methodName = className + ".describe(String, Properties,
         int) ";
40
                     if (count > retry) {
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
45
                     WSPResponse returnCode;
                     try {
                           conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
50
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                           allParmsAndAttrs.put(PARM_TARGET, pTarget);
55
                           returnCode = conn.makeRequest(COMMAND DESCRIBE,
         allParmsAndAttrs);
```

```
pool.checkIn(conn);
                            return returnCode;
                      } catch (Exception e) {
                            try {
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
10
                            finally_{
                                  return describe(
                                        pTarget,
                                        optionalAttributes,
15
                                        count + 1);
20
                 * This method verifies whether or not a specified domain name is
         available.
                * <BR><PRE>
                     Expected Major Result Code:
25
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                * @param pDomainName the parameter value
                  @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
30
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND VERIFY
                * @see NSIWholesaleAPI#CLASS_DOMAIN NAME
                 * @see NSIWholesaleAPI#COMBO_VERIFY DOMAIN NAME
                 * @see NSIWholesaleAPI#PARM_DOMAIN_NAME
35
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING RETURNED
               public WSPResponse verifyDomainName(
                     String pDomainName)
40
               throws NSIWholesaleException {
                     return verifyDomainName(
                           pDomainName,
                           new Properties(),
45
                * This method verifies whether or not a specified domain name is
         available.
                * <BR><PRE>
50
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                * @param pDomainName the parameter value
                  @param optionalAttributes a property list of optional attributes
55ౢ
                  @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
```

```
* @see NSIWholesaleAPI#COMMAND VERIFY
                  @see NSIWholesaleAPI#CLASS_DOMAIN_NAME
                  @see NSIWholesaleAPI#COMBO_VERIFY_DOMAIN_NAME
                 * @see NSIWholesaleAPI#PARM_DOMAIN_NAME
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
               public WSPResponse verifyDomainName(
                      String pDomainName,
10
                      Properties optionalAttributes)
               throws NSIWholesaleException {
                     return verifyDomainName(
                            pDomainName,
                            optionalAttributes,
15
                            0);
               protected WSPResponse verifyDomainName(
                     String pDomainName,
                     Properties optionalAttributes,
20
                     int count)
               throws NSIWholesaleException {
                     String methodName = className + ".verifyDomainName(String,
         Properties, int) ";
                     if (count > retry) {
25
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
30
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
35
                            // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_DOMAIN_NAME, pDomainName);
40
                            returnCode = conn.makeRequest(COMBO_VERIFY_DOMAIN_NAME,
         allParmsAndAttrs):
                            pool.checkIn(conn);
                            return returnCode;
                      } catch (Exception e) {
45
                            try {
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
50
         ResourceException" + re);
                            finally {
                                  return verifyDomainName(
                                        pDomainName,
55
                                        optionalAttributes,
                                        count + 1);
```

```
}
 5
                * This method verifies if series of domains are available. The command
                * will take the domain target string and add the .com, .net, and .org
                * TLD suffix and verify the domain name availability.
                * <BR><PRE>
                     Expected Major Result Code:
10
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           DomainName1:
                           DomainName2:
                           DomainName3:
15
                            ...etc...
                * </PRE><BR>
                * @param pDomainTarget the parameter value
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
20
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_VERIFY
                * @see NSIWholesaleAPI#CLASS_DOMAINS
                * @see NSIWholesaleAPI#COMBO_VERIFY_DOMAINS
                * @see NSIWholesaleAPI#PARM_DOMAIN TARGET
25
                * @see WSPResponse#COMMAND EXECUTION SUCCEEDED NO DATA BEING RETURNED
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
30
               public WSPResponse verifyDomains(
                     String pDomainTarget)
               throws NSIWholesaleException {
                     return verifyDomains(
                           pDomainTarget,
35
                           new Properties(),
                  This method verifies if series of domains are available. The command
40
                * will take the domain target string and add the .com, .net, and .org
                * TLD suffix and verify the domain name availability.
                * <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
45
                     Expected Result Property Key(s) Returned:
                           DomainName1:
                           DomainName2:
                           DomainName3:
                            ..etc...
50
                * </PRE><BR>
                * @param pDomainTarget the parameter value
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
                @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
55
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_VERIFY
```

* @see NSIWholesaleAPI#CLASS_DOMAINS

```
* @see NSIWholesaleAPI#COMBO_VERIFY DOMAINS
                 * @see NSIWholesaleAPI#PARM_DOMAIN_TARGET
                 * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                 * @see
 5
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                public WSPResponse verifyDomains(
                      String pDomainTarget,
10
                      Properties optionalAttributes)
                throws NSIWholesaleException {
                      return verifyDomains(
                            pDomainTarget,
                            optionalAttributes,
15
                            0);
               protected WSPResponse verifyDomains(
                      String pDomainTarget,
                      Properties optionalAttributes,
20
                     int count)
                throws NSIWholesaleException {
                      String methodName = className + ".verifyDomains(String,
         Properties, int) ";
                      if (count > retry) {
25
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
30
                      try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
35
                            // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_DOMAIN_TARGET, pDomainTarget);
40
                            returnCode = conn.makeRequest(COMBO_VERIFY_DOMAINS,
         allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
                      } catch (Exception e) {
45
                            try {
                                 pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
50
         ResourceException" + re);
                            finally {
                                 return verifyDomains(
                                        pDomainTarget,
55
                                        optionalAttributes,
                                        count + 1);
```

```
5
                * This method verifies whether or not a specified customer account id
         and
                * password are valid.
                  <BR><PRE>
                     Expected Major Result Code:
10
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                * @param pCustomerAccountId the parameter value
                * @param pCustomerPassword the parameter value
                 * @return the Wholesale Server Protocol Server response
15
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND VERIFY
                * @see NSIWholesaleAPI#CLASS PASSWORD
                * @see NSIWholesaleAPI#COMBO VERIFY PASSWORD
20
                * @see NSIWholesaleAPI#PARM CUSTOMER ACCOUNT ID
                * @see NSIWholesaleAPI#PARM CUSTOMER PASSWORD
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED NO DATA BEING RETURNED
25
               public WSPResponse verifyPassword(
                     String pCustomerAccountId,
                     String pCustomerPassword)
               throws NSIWholesaleException {
                     return verifyPassword(
30
                           pCustomerAccountId,
                           pCustomerPassword,
                           new Properties(),
                           0);
35
                  This method verifies whether or not a specified customer account id
         and
                * password are valid.
                  <BR><PRE>
40
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * @param pCustomerAccountId the parameter value

    * @param pCustomerPassword the parameter value

45
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_VERIFY
50
                * @see NSIWholesaleAPI#CLASS_PASSWORD
                * @see NSIWholesaleAPI#COMBO_VERIFY_PASSWORD
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT ID
                 * @see NSIWholesaleAPI#PARM CUSTOMER PASSWORD
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO DATA BEING RETURNED
55
               public WSPResponse verifyPassword(
```

```
String pCustomerAccountId,
                      String pCustomerPassword,
                      Properties optionalAttributes)
               throws NSIWholesaleException {
 5
                      return verifyPassword(
                            pCustomerAccountId,
                            pCustomerPassword,
                            optionalAttributes,
10.
               protected WSPResponse verifyPassword(
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     Properties optionalAttributes,
15
                      int count)
               throws NSIWholesaleException {
                     String methodName = className + ".verifyPassword(String, String,
         Properties, int) ";
                    - if -(count > retry) {
20
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
25
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
30
                            // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
         pCustomerAccountId);
35
                            allParmsAndAttrs.put(PARM CUSTOMER PASSWORD,
         pCustomerPassword);
                            returnCode = conn.makeRequest(COMBO_VERIFY_PASSWORD,
         allParmsAndAttrs);
40
                            pool.checkIn(conn);
                            return returnCode;
                     } catch (Exception e) {
                            try {
                                  pool.release(conn);
45
                           catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
50
                            finally {
                                  return verifyPassword(
                                        pCustomerAccountId,
                                        pCustomerPassword,
                                        optionalAttributes,
55
                                        count + 1);
```

```
5

    This method creates an individual customer account and returns an

                 * automatically generated customer account id.
                  <BR><PRE>
                      Expected Major Result Code:
         COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
10
                      Expected Result Property Key(s) 'Returned:
                            ATTR CUSTOMER_ACCOUNT_ID
                 * </PRE><BR>
                 * @param aFirstName the attribute value
                 * @param aLastName the attribute value
15
                 * @param aAddress1 the attribute value

    * @param aCountryCode the attribute value

                 * @param aPhone the attribute value
                 * @param aCustomerPassword the attribute value

    * @param aAuthQuestion the attribute value

20
                 * @param aAuthAnswer the attribute value
                 * @param aCity the attribute value
                 * @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
25
                 * @see NSIWholesaleAPI#COMMAND_CREATE
                 * @see NSIWholesaleAPI#CLASS_INDIVIDUAL_ACCOUNT
                 * @see NSIWholesaleAPI#COMBO_CREATE INDIVIDUAL ACCOUNT
                 * @see NSIWholesaleAPI#ATTR_FIRST_NAME
                 * @see NSIWholesaleAPI#ATTR_LAST_NAME
30
                 * @see NSIWholesaleAPI#ATTR ADDRESS1
                 * @see NSIWholesaleAPI#ATTR COUNTRY CODE
                 * @see NSIWholesaleAPI#ATTR PHONE
                 * @see NSIWholesaleAPI#ATTR CUSTOMER PASSWORD
                 * @see NSIWholesaleAPI#ATTR AUTH QUESTION
35
                 * @see NSIWholesaleAPI#ATTR AUTH ANSWER
                 * @see NSIWholesaleAPI#ATTR_CITY
                 * @see NSIWholesaleAPI#ATTR STATE
                 * @see NSIWholesaleAPI#ATTR POSTAL CODE
40
                 * @see NSIWholesaleAPI#ATTR ADDRESS2
                 * @see NSIWholesaleAPI#ATTR_ADDRESS3
                 * @see NSIWholesaleAPI#ATTR_ADDRESS4
                 * @see NSIWholesaleAPI#ATTR_ADDRESS5

    @see NSIWholesaleAPI#ATTR EMAIL

45
                  @see NSIWholesaleAPI#ATTR_FAX
                 * @see WSPResponse#INVALID_VALUE
         WSPResponse#COMMAND EXECUTION SUCCEEDED_PROPERTIES_BEING RETURNED
50
                 * @see NSIWholesaleAPI#ATTR_CUSTOMER_ACCOUNT_ID
               public WSPResponse createIndividualAccount(
                      String aFirstName,
55
                     String aLastName,
                      String aAddress1,
                      String aCountryCode,
```

```
String aPhone,
                     String aCustomerPassword,
                     String aAuthQuestion,
                     String aAuthAnswer,
5
                     String aCity)
               throws NSIWholesaleException {
                     return createIndividualAccount(
                           aFirstName,
                           aLastName,
10
                           aAddress1,
                           aCountryCode,
                           aPhone,
                           aCustomerPassword,
                           aAuthQuestion,
15
                           aAuthAnswer,
                           aCity,
                           new Properties(),
                           0);
20
                 This method creates an individual customer account and returns an
                  automatically generated customer account id.
                  <BR><PRE>
                     Optional Attribute Key(s):
25
                           ATTR_ADDRESS2
                           ATTR_ADDRESS3
                           ATTR_ADDRESS4
                           ATTR_ADDRESS5
                           ATTR_EMAIL
30
                           ATTR FAX
                     Expected Major Result Code:
     : COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
35
                           ATTR_CUSTOMER_ACCOUNT_ID
                * </PRE><BR>
                  @param aFirstName the attribute value
                  @param aLastName the attribute value.
                  @param aAddress1 the attribute value
40
                  @param aCountryCode the attribute value
                  @param aPhone the attribute value
                  @param aCustomerPassword the attribute value
                  @param aAuthQuestion the attribute value
                  @param aAuthAnswer the attribute value
45
                 * @param aCity the attribute value

    @param optionalAttributes a property list of optional attributes

                 * Oreturn the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
50
                * @see NSIWholesaleAPI#COMMAND CREATE
                * @see NSIWholesaleAPI#CLASS_INDIVIDUAL_ACCOUNT
                * @see NSIWholesaleAPI#COMBO CREATE INDIVIDUAL ACCOUNT
                * @see NSIWholesaleAPI#ATTR_FIRST_NAME
                 * @see NSIWholesaleAPI#ATTR_LAST_NAME
55
                 # @see NSIWholesaleAPI#ATTR_ADDRESS1
                  @see NSIWholesaleAPI#ATTR_COUNTRY_CODE
                  @see NSIWholesaleAPI#ATTR_PHONE
```

```
* @see NSIWholesaleAPI#ATTR CUSTOMER PASSWORD
                 * @see NSIWholesaleAPI#ATTR_AUTH_QUESTION
                 * @see NSIWholesaleAPI#ATTR AUTH ANSWER
                 * @see NSIWholesaleAPI#ATTR_CITY
                 * @see NSIWholesaleAPI#ATTR STATE
                 * @see NSIWholesaleAPI#ATTR_POSTAL_CODE .
                 * @see NSIWholesaleAPI#ATTR_ADDRESS2
                 * @see NSIWholesaleAPI#ATTR_ADDRESS3
10
                 * @see NSIWholesaleAPI#ATTR_ADDRESS4
                 * @see NSIWholesaleAPI#ATTR_ADDRESS5
                 * @see NSIWholesaleAPI#ATTR_EMAIL
                 * @see NSIWholesaleAPI#ATTR_FAX
15
                 * @see WSPResponse#INVALID_VALUE
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
                * @see NSIWholesaleAPI#ATTR_CUSTOMER_ACCOUNT_ID
20
               */
               public WSPResponse createIndividualAccount(
                     String aFirstName,
                      String aLastName,
                      String aAddress1,
25
                     String aCountryCode,
                     String aPhone,
                     String aCustomerPassword,
                     String aAuthQuestion,
                     String aAuthAnswer,
30
                     String aCity,
                      Properties optionalAttributes)
               throws NSIWholesaleException {
                     return createIndividualAccount(
                            aFirstName,
35
                            aLastName,
                            aAddress1,
                            aCountryCode,
                            aPhone,
                            aCustomerPassword,
40
                            aAuthQuestion,
                            aAuthAnswer,
                            aCity,
                            optionalAttributes,
45
               protected WSPResponse createIndividualAccount(
                     String aFirstName,
                     String aLastName,
                     String aAddress1,
50
                     String aCountryCode,
                     String aPhone,
                     String aCustomerPassword,
                     String aAuthQuestion,
                     String aAuthAnswer,
55
                     String aCity,
                     Properties optionalAttributes,
                     int count)
```

```
throws NSIWholesaleException {
                      String methodName = className +
          ".createIndividualAccount(StringX9, Properties, int) ";
                      if (count > retry) {
 5
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                      NSIWholesaleConnection conn = null;
                      WSPResponse returnCode;
10
                      try { ...
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
15
                            // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(ATTR_FIRST_NAME, aFirstName);
                            allParmsAndAttrs.put(ATTR_LAST_NAME, aLastName); .
20
                            allParmsAndAttrs.put(ATTR_ADDRESS1, aAddress1);
                            allParmsAndAttrs.put(ATTR_COUNTRY_CODE, aCountryCode);
                            allParmsAndAttrs.put(ATTR_PHONE, aPhone);
                            allParmsAndAttrs.put (ATTR CUSTOMER PASSWORD,
         aCustomerPassword);
25
                            allParmsAndAttrs.put(ATTR_AUTH_QUESTION, aAuthQuestion);
                            allParmsAndAttrs.put(ATTR_AUTH_ANSWER, aAuthAnswer);
                            allParmsAndAttrs.put(ATTR_CITY, aCity);
                            returnCode =
30
         conn.makeRequest(COMBO_CREATE_INDIVIDUAL_ACCOUNT, allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
                      catch (Exception e) {
35
                            try {
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
40
         ResourceException"
                            + re);
                            finally {
                                  return createIndividualAccount(
                                        aFirstName,
45
                                        aLastName.
                                        aAddress1,
                                        aCountryCode,
                                        aPhone,
                                        aCustomerPassword,
50
                                        aAuthQuestion,
                                        aAuthAnswer,
                                        aCity,
                                        optionalAttributes,
                                        count + 1);
55
```

```
This method creates an individual customer account and returns an
                 * automatically generated customer account id.
 5
                  <BR><PRE>
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR_CUSTOMER_ACCOUNT ID
10
                  </PRE><BR>
                  @param aFirstName the attribute value
                  @param aLastName the attribute value
                  @param aAddress1 the attribute value
                  @param aCountryCode the attribute value
15
                  @param aPhone the attribute value
                  @param aCustomerPassword the attribute value
                  @param aAuthQuestion the attribute value
                  @param aAuthAnswer the attribute value
                  @param aCity the attribute value
20
                  @param aState the attribute value
                  @param aPostalCode the attribute value
                  @return the Wholesale Server Protocol Server response
                 @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
25
                  @see NSIWholesaleAPI#COMMAND CREATE
                  @see NSIWholesaleAPI#CLASS_INDIVIDUAL_ACCOUNT
                  @see NSIWholesaleAPI#COMBO_CREATE_INDIVIDUAL_ACCOUNT
                  @see NSIWholesaleAPI#ATTR FIRST NAME
                  @see NSIWholesaleAPI#ATTR_LAST_NAME
30
                  @see NSIWholesaleAPI#ATTR_ADDRESS1
                  @see NSIWholesaleAPI#ATTR_COUNTRY_CODE
                  @see NSIWholesaleAPI#ATTR_PHONE
                  @see NSIWholesaleAPI#ATTR_CUSTOMER_PASSWORD
                  @see NSIWholesaleAPI#ATTR_AUTH_QUESTION
35
                  @see NSIWholesaleAPI#ATTR_AUTH_ANSWER
                 * @see NSIWholesaleAPI#ATTR_CITY
                 * @see NSIWholesaleAPI#ATTR_STATE
                  @see NSIWholesaleAPI#ATTR_POSTAL_CODE
40
                  @see NSIWholesaleAPI#ATTR ADDRESS2
                 * @see NSIWholesaleAPI#ATTR_ADDRESS3
                 * @see NSIWholesaleAPI#ATTR_ADDRESS4
                 * @see NSIWholesaleAPI#ATTR_ADDRESS5
                 * @see NSIWholesaleAPI#ATTR_EMAIL
45
                  @see NSIWholesaleAPI#ATTR_FAX
                  @see WSPResponse#INVALID_VALUE
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
50
                * @see NSIWholesaleAPI#ATTR_CUSTOMER_ACCOUNT ID
               */
               public WSPResponse createIndividualAccount(
                     String aFirstName,
55
                     String aLastName,
                     String aAddress1,
                     String aCountryCode,
```

```
String aPhone,
                     String aCustomerPassword,
                     String aAuthQuestion,
                     String aAuthAnswer,
 5
                     String aCity,
                     String aState,
                     String aPostalCode)
               throws NSIWholesaleException {
                     return createIndividualAccount(
10
                            aFirstName.
                           aLastName,
                           aAddress1,
                            aCountryCode,
                            aPhone,
15
                            aCustomerPassword,
                           aAuthQuestion,
                            aAuthAnswer,
                            aCity,
                           aState,
20
                           aPostalCode,
                           new Properties(),
25
                  This method creates an individual customer account and returns an
                  automatically generated customer account id.
                  <BR><PRE>
                     Optional Attribute Key(s):
                           ATTR_ADDRESS2
30
                           ATTR_ADDRESS3
                           ATTR_ADDRESS4
                           ATTR_ADDRESS5
                           ATTR_EMAIL
                           ATTR_FAX
35
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR_CUSTOMER_ACCOUNT_ID
40
                 </PRE><BR>
                  @param aFirstName the attribute value
                  @param aLastName the attribute value
                  @param aAddress1 the attribute value
                  @param aCountryCode the attribute value
45
                  @param aPhone the attribute value
                  @param aCustomerPassword the attribute value
                  @param aAuthQuestion the attribute value
                  @param aAuthAnswer the attribute value
                  @param aCity the attribute value
50
                  @param aState the attribute value
                  @param aPostalCode the attribute value
                  @param optionalAttributes a property list of optional attributes
                  @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
55
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_CREATE
                  @see NSIWholesaleAPI#CLASS_INDIVIDUAL ACCOUNT
```

```
@see NSIWholesaleAPI#COMBO_CREATE_INDIVIDUAL_ACCOUNT
                  @see NSIWholesaleAPI#ATTR_FIRST_NAME
                  @see NSIWholesaleAPI#ATTR_LAST_NAME
                  @see NSIWholesaleAPI#ATTR ADDRESS1
 5
                 * @see NSIWholesaleAPI#ATTR_COUNTRY_CODE
                * @see NSIWholesaleAPI#ATTR_PHONE
                * @see NSIWholesaleAPI#ATTR_CUSTOMER PASSWORD
                * @see NSIWholesaleAPI#ATTR AUTH QUESTION
                * @see NSIWholesaleAPI#ATTR AUTH ANSWER
10
                * @see NSIWholesaleAPI#ATTR_CITY
                * @see NSIWholesaleAPI#ATTR_STATE
                  @see NSIWholesaleAPI#ATTR POSTAL CODE
                  @see NSIWholesaleAPI#ATTR_ADDRESS2
15
                * @see NSIWholesaleAPI#ATTR ADDRESS3
                * @see NSIWholesaleAPI#ATTR ADDRESS4

    * @see NSIWholesaleAPI#ATTR ADDRESS5

                * @see NSIWholesaleAPI#ATTR EMAIL
                  @see NSIWholesaleAPI#ATTR FAX
20
                  @see WSPResponse#INVALID VALUE
         WSPResponse#COMMAND EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                * @see NSIWholesaleAPI#ATTR_CUSTOMER_ACCOUNT_ID
.25
               public WSPResponse createIndividualAccount(
                     String aFirstName,
                     String aLastName,
30
                     String aAddressl,
                     String aCountryCode,
                     String aPhone,
                     String aCustomerPassword,
                     String aAuthQuestion,
35
                     String aAuthAnswer,
                     String aCity,
                     String aState,
                     String aPostalCode,
                    Properties optionalAttributes)
40
               throws NSIWholesaleException {
                     return createIndividualAccount(
                            aFirstName,
                            aLastName,
                            aAddress1,
45
                            aCountryCode,
                            aPhone,
                            aCustomerPassword,
                            aAuthQuestion,
                            aAuthAnswer,
50
                            aCity,
                            aState,
                            aPostalCode,
                            optionalAttributes,
55
               protected WSPResponse createIndividualAccount(
```

String aFirstName,

```
String aLastName,
                      String aAddress1,
                      String aCountryCode,
                      String aPhone,
 5
                      String aCustomerPassword,
                      String aAuthQuestion,
                      String aAuthAnswer,
                      String aCity,
                      String aState,
10
                      String aPostalCode,
                      Properties optionalAttributes,
                      int count)
               throws NSIWholesaleException {
                      String methodName = className +
15
         ".createIndividualAccount(StringX11, Properties, int) '
                      if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
20
                     NSIWholesaleConnection conn = null;
                      WSPResponse returnCode;
                      try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
25
                            Properties allParmsAndAttrs = new Properties();
                           // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
30
                            allParmsAndAttrs.put(ATTR_FIRST_NAME, aFirstName);
                            allParmsAndAttrs.put(ATTR LAST NAME, aLastName);
                            allParmsAndAttrs.put(ATTR ADDRESS1, aAddress1);
                            allParmsAndAttrs.put(ATTR COUNTRY CODE, aCountryCode);
                            allParmsAndAttrs.put(ATTR PHONE, aPhone);
35
                            allParmsAndAttrs.put(ATTR_CUSTOMER_PASSWORD,
         aCustomerPassword);
                            allParmsAndAttrs.put(ATTR_AUTH_QUESTION, aAuthQuestion);
                            allParmsAndAttrs.put(ATTR_AUTH_ANSWER, aAuthAnswer);
                            allParmsAndAttrs.put(ATTR_CITY, aCity);
40
                            allParmsAndAttrs.put(ATTR_STATE, aState);
                            allParmsAndAttrs.put(ATTR_POSTAL_CODE, aPostalCode);
                            returnCode =
         conn.makeRequest(COMBO_CREATE_INDIVIDUAL_ACCOUNT, allParmsAndAttrs);
45
                            pool.checkIn(conn);
                            return returnCode;
                     catch (Exception e) {
                            try {
50
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
55
                            finally {
                                  return createIndividualAccount(
```

aLastName, aAddress1, aCountryCode, 5 aPhone, aCustomerPassword, aAuthQuestion, aAuthAnswer, aCity, 10 aState, aPostalCode, optionalAttributes, count + 1);15 This method creates a business customer account and returns an 20 automatically generated customer account id.
<PRE> Expected Major Result Code: COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED Expected Result Property Key(s) Returned: 25 ATTR_CUSTOMER_ACCOUNT_ID </PRE>
 @param aCompanyName the attribute value @param aCompanyType the attribute value @param aAddress1 the attribute value 30 @param aCity the attribute value @param aCountryCode the attribute value @param aPhone the attribute value * @param aCustomerPassword the attribute value @param aAuthQuestion the attribute value 35 @param aAuthAnswer the attribute value @param aLegalContactFirstName the attribute value @param aLegalContactLastName the attribute value @param optionalAttributes a property list of optional attributes @return the Wholesale Server Protocol Server response 40 @exception_nsi.wholesale.toolkit.javaapi.NSIWholesaleException_when unable to complete command * @see NSIWholesaleAPI#COMMAND_CREATE @see NSIWholesaleAPI#CLASS BUSINESS ACCOUNT @see NSIWholesaleAPI#COMBO CREATE BUSINESS ACCOUNT 45 @see NSIWholesaleAPI#ATTR COMPANY NAME @see NSIWholesaleAPI#ATTR_COMPANY_TYPE @see NSIWholesaleAPI#ATTR_ADDRESS1 @see NSIWholesaleAPI#ATTR_CITY @see NSIWholesaleAPI#ATTR_COUNTRY_CODE 50 @see NSIWholesaleAPI#ATTR_PHONE @see NSIWholesaleAPI#ATTR_CUSTOMER_PASSWORD @see NSIWholesaleAPI#ATTR_AUTH_QUESTION @see NSIWholesaleAPI#ATTR_AUTH_ANSWER @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FIRST_NAME - 55 @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_LAST_NAME @see NSIWholesaleAPI#ATTR_STATE

aFirstName.

```
* @see NSIWholesaleAPI#ATTR POSTAL CODE
                * @see NSIWholesaleAPI#ATTR ADDRESS2
                 * @see NSIWholesaleAPI#ATTR ADDRESS3
                * @see NSIWholesaleAPI#ATTR ADDRESS4
5
                * @see NSIWholesaleAPI#ATTR ADDRESS5
                * @see NSIWholesaleAPI#ATTR EMAIL
                * @see NSIWholesaleAPI#ATTR FAX
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS1
                 * @see NSIWholesaleAPI#ATTR LEGAL CONTACT ADDRESS2
10
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS3
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS4
                 * @see NSIWholesaleAPI#ATTR LEGAL CONTACT ADDRESS5
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_CITY
                 * @see NSIWholesaleAPI#ATTR LEGAL CONTACT STATE
15
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_POSTAL CODE
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_COUNTRY CODE
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_PHONE
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FAX
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_EMAIL
20
                 * @see WSPResponse#INVALID_VALUE
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
                * @see NSIWholesaleAPI#ATTR_CUSTOMER_ACCOUNT_ID
25
               public WSPResponse createBusinessAccount(
                     String aCompanyName,
                     String aCompanyType,
30
                     String aAddress1,
                     String aCity,
                     String aCountryCode,
                     String aPhone,
                     String aCustomerPassword,
35
                     String aAuthQuestion,
                     String aAuthAnswer,
                     String aLegalContactFirstName,
                     String aLegalContactLastName)
               throws NSIWholesaleException {
40
                     return createBusinessAccount(
                           aCompanyName,
                           aCompanyType,
                           aAddress1,
                           aCity,
45
                           aCountryCode,
                           aPhone,
                           aCustomerPassword,
                           aAuthQuestion,
                           aAuthAnswer,
50
                           aLegalContactFirstName,
                           aLegalContactLastName,
                           new Properties(),
                           0);
55
```

*
<PRE>

```
Optional Attribute Key(s): .
                            ATTR_ADDRESS2
                            ATTR_ADDRESS3
 5
                            ATTR_ADDRESS4
                            ATTR ADDRESS5
                            ATTR EMAIL
                            ATTR FAX
                            ATTR_LEGAL_CONTACT_ADDRESS1
10
                            ATTR_LEGAL_CONTACT_ADDRESS2
                            ATTR_LEGAL_CONTACT_ADDRESS3
                            ATTR LEGAL CONTACT ADDRESS4
                           ATTR_LEGAL_CONTACT_ADDRESS5
                           ATTR_LEGAL_CONTACT_CITY
15
                            ATTR LEGAL_CONTACT_STATE
                            ATTR_LEGAL_CONTACT_POSTAL_CODE
                           ATTR_LEGAL_CONTACT_COUNTRY_CODE
                            ATTR_LEGAL_CONTACT_PHONE
                            ATTR_LEGAL_CONTACT_FAX
20
                           ATTR_LEGAL_CONTACT_EMAIL :
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
25
                           ATTR_CUSTOMER_ACCOUNT_ID
                  </PRE><BR>
                  @param aCompanyName the attribute value
                  @param aCompanyType the attribute value
                  @param aAddress1 the attribute value
30
                  @param aCity the attribute value
                  @param aCountryCode the attribute value
                  @param aPhone the attribute value
                  @param aCustomerPassword the attribute value
                  @param aAuthQuestion the attribute value
35
                  @param aAuthAnswer the attribute value
                  @param aLegalContactFirstName the attribute value
                  @param aLegalContactLastName the attribute value
                  @param optionalAttributes a property list of optional attributes
                  Oreturn the Wholesale Server Protocol Server response
40
                  @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                  @see NSIWholesaleAPI#COMMAND_CREATE
                  @see NSIWholesaleAPI#CLASS BUSINESS ACCOUNT
                  @see NSIWholesaleAPI#COMBO_CREATE_BUSINESS_ACCOUNT
45
                  @see NSIWholesaleAPI#ATTR COMPANY NAME
                  @see NSIWholesaleAPI#ATTR_COMPANY TYPE
                  @see NSIWholesaleAPI#ATTR ADDRESS1
                  @see NSIWholesaleAPI#ATTR CITY
                  @see NSIWholesaleAPI#ATTR COUNTRY CODE
50
                  @see NSIWholesaleAPI#ATTR_PHONE
```

55

@see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FIRST_NAME

@see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_LAST_NAME

* @see NSIWholesaleAPI#ATTR_CUSTOMER_PASSWORD * @see NSIWholesaleAPI#ATTR_AUTH_QUESTION * @see NSIWholesaleAPI#ATTR AUTH_ANSWER

```
* @see NSIWholesaleAPI#ATTR POSTAL CODE
                  @see NSIWholesaleAPI#ATTR_ADDRESS2
                 * @see NSIWholesaleAPI#ATTR_ADDRESS3
                 * @see NSIWholesaleAPI#ATTR_ADDRESS4
 5
                 * @see NSIWholesaleAPI#ATTR_ADDRESS5
                 * @see NSIWholesaleAPI#ATTR_EMAIL
                 * @see NSIWholesaleAPI#ATTR FAX
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS1
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS2
10
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS3
                 * @see.NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS4
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS5
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_CITY
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_STATE
15
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_POSTAL_CODE
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_COUNTRY_CODE
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_PHONE
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FAX
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_EMAIL
20
                  @see WSPResponse#INVALID_VALUE
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
                * @see NSIWholesaleAPI#ATTR_CUSTOMER_ACCOUNT ID
25
               */
               public WSPResponse createBusinessAccount(
                      String aCompanyName,
                      String aCompanyType,
30
                      String aAddressl,
                      String aCity,
                      String aCountryCode,
                      String aPhone,
                      String aCustomerPassword,
35
                      String aAuthQuestion,
                      String aAuthAnswer,
                      String aLegalContactFirstName,
                      String aLegalContactLastName,
                      Properties optionalAttributes)
40
               throws NSIWholesaleException {
                      return createBusinessAccount (
                            aCompanyName,
                            aCompanyType,
                            aAddress1,
45
                            aCity,
                            aCountryCode,
                            aPhone.
                            aCustomerPassword,
                            aAuthQuestion,
50
                            aAuthAnswer,
                            aLegalContactFirstName,
                            aLegalContactLastName,
                            optionalAttributes,
                            0);
55
               protected WSPResponse createBusinessAccount(
                     String aCompanyName,
```

```
String aCompanyType,
                      String aAddress1,
                      String aCity,
                      String aCountryCode,
 5
                      String aPhone,
                      String aCustomerPassword,
                      String aAuthQuestion,
                      String aAuthAnswer,
                     String aLegalContactFirstName,
10
                     String aLegalContactLastName,
                     Properties optionalAttributes,
                      int count)
               throws NSIWholesaleException {
                     String methodName = className + ".createBusinessAccount(StringX11,
15
         Properties, int) ";
                     if (count > retry) {
                            throw new NSIWholesaleException (methodName + "Unable to
         complete command");
20
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
25
                            Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
30
                            allParmsAndAttrs.put(ATTR_COMPANY_NAME, aCompanyName);
                            allParmsAndAttrs.put(ATTR_COMPANY_TYPE, aCompanyType);
                            allParmsAndAttrs.put(ATTR_ADDRESS1, aAddress1);
                            allParmsAndAttrs.put(ATTR_CITY, aCity);
                            allParmsAndAttrs.put(ATTR_COUNTRY_CODE, aCountryCode);
35
                            allParmsAndAttrs.put(ATTR PHONE, aPhone);
                            allParmsAndAttrs.put(ATTR CUSTOMER PASSWORD,
         aCustomerPassword);
                            allParmsAndAttrs.put(ATTR AUTH QUESTION, aAuthQuestion);
                            allParmsAndAttrs.put(ATTR AUTH ANSWER, aAuthAnswer);
40
                            allParmsAndAttrs.put(ATTR_LEGAL CONTACT FIRST NAME,
         aLegalContactFirstName);
                            allParmsAndAttrs.put(ATTR_LEGAL_CONTACT_LAST_NAME,
         aLegalContactLastName);
45
                            returnCode = conn.makeRequest(COMBO_CREATE BUSINESS ACCOUNT,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
                     } catch (Exception e) {
50
                           try {
                                  pool.release(conn);
                           catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
55
         ResourceException" + re);
                            finally {
```

```
aCompanyName,
                                        aCompanyType,
                                         aAddress1,
 5
                                        aCity,
                                         aCountryCode,
                                        aPhone,
                                        aCustomerPassword,
                                        aAuthQuestion,
10
                                        aAuthAnswer,
                                        aLegalContactFirstName,
                                        aLegalContactLastName,
                                        optionalAttributes,
                                        count + 1);
15
20
                   This method creates a business customer account and returns an
                  automatically generated customer account id.
                  <BR><PRE>
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
25
                      Expected Result Property Key(s) Returned:
                            ATTR_CUSTOMER_ACCOUNT ID
                  </PRE><BR>
                  @param aCompanyName the attribute value
                  @param aCompanyType the attribute value
30
                 * @param aAddress1 the attribute value
                 * @param aCity the attribute value
                 * @param aState the attribute value —
                  @param aPostalCode the attribute value
                  @param aCountryCode the attribute value
35
                  @param aPhone the attribute value
                  @param aCustomerPassword the attribute value
                  @param aAuthQuestion the attribute value
                  @param aAuthAnswer the attribute value
                  @param aLegalContactFirstName the attribute value
40
                  @param aLegalContactLastName the attribute value
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND CREATE
45
                 * @see NSIWholesaleAPI#CLASS_BUSINESS_ACCOUNT
                * @see NSIWholesaleAPI#COMBO_CREATE_BUSINESS_ACCOUNT
                * @see NSIWholesaleAPI#ATTR COMPANY NAME
                * @see NSIWholesaleAPI#ATTR_COMPANY_TYPE
                * @see NSIWholesaleAPI#ATTR ADDRESS1
50
                * @see NSIWholesaleAPI#ATTR CITY
                * @see NSIWholesaleAPI#ATTR STATE
                * @see NSIWholesaleAPI#ATTR POSTAL CODE
                * @see NSIWholesaleAPI#ATTR COUNTRY CODE
                * @see NSIWholesaleAPI#ATTR_PHONE
55
                * @see NSIWholesaleAPI#ATTR CUSTOMER PASSWORD
                * @see NSIWholesaleAPI#ATTR_AUTH_QUESTION
                  @see NSIWholesaleAPI#ATTR AUTH ANSWER
```

return createBusinessAccount(

```
* @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FIRST_NAME
                   @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_LAST_NAME
                   @see NSIWholesaleAPI#ATTR_ADDRESS2
 5
                   @see NSIWholesaleAPI#ATTR_ADDRESS3
                   @see NSIWholesaleAPI#ATTR_ADDRESS4
                   @see NSIWholesaleAPI#ATTR ADDRESS5
                   @see NSIWholesaleAPI#ATTR EMAIL
                 * @see NSIWholesaleAPI#ATTR FAX
10
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS1
                 * @see NSIWholesaleAPI#ATTR LEGAL CONTACT ADDRESS2
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS3
                 * @see NSIWholesaleAPI#ATTR LEGAL CONTACT ADDRESS4
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS5
15
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_CITY
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_STATE
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_POSTAL_CODE
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_COUNTRY_CODE
                  @see NSIWholesaleAPI#ATTR_LEGAL CONTACT PHONE
20
                 * @see NSIWholesaleAPI#ATTR LEGAL CONTACT FAX
                   @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_EMAIL
                 * @see WSPResponse#INVALID VALUE
25
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                 * @see NSIWholesaleAPI#ATTR_CUSTOMER_ACCOUNT ID
               public WSPResponse createBusinessAccount(
30
                      String aCompanyName,
                      String aCompanyType,
                      String aAddress1,
                      String aCity,
                      String aCountryCode,
35
                      String aPhone,
                      String aCustomerPassword,
                      String aAuthQuestion,
                      String aAuthAnswer,
                      String aLegalContactFirstName,
40
                      String aLegalContactLastName,
                     String aState,
                      String aPostalCode)
               throws NSIWholesaleException {
                      return createBusinessAccount(
45
                           aCompanyName,
                           aCompanyType,
                            aAddress1,
                            aCity,
                            aCountryCode,
50
                            aPhone,
                            aCustomerPassword,
                            aAuthQuestion,
                            aAuthAnswer,
                            aLegalContactFirstName,
55
                            aLegalContactLastName,
                            aState,
                            aPostalCode,
```

```
new Properties(),
                  This method creates a business customer account and returns an
                  automatically generated customer account id.
                   <BR><PRE>
                      Optional Attribute Key(s):
                            ATTR_ADDRESS2
10
                            ATTR ADDRESS3
                            ATTR ADDRESS4
                            ATTR_ADDRESS5
                            ATTR_EMAIL
                            ATTR_FAX
15
                            ATTR_LEGAL_CONTACT_ADDRESS1
                            ATTR_LEGAL_CONTACT_ADDRESS2
                            ATTR LEGAL CONTACT ADDRESS3
                            ATTR_LEGAL CONTACT ADDRESS4
                            ATTR_LEGAL CONTACT ADDRESS5
20
                            ATTR LEGAL CONTACT CITY
                            ATTR LEGAL CONTACT STATE
                            ATTR LEGAL CONTACT POSTAL CODE
                            ATTR_LEGAL_CONTACT_COUNTRY CODE
                            ATTR LEGAL CONTACT PHONE
25
                            ATTR_LEGAL CONTACT FAX
                            ATTR_LEGAL_CONTACT EMAIL
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
30
                     Expected Result Property Key(s) Returned:
                            ATTR CUSTOMER ACCOUNT ID
               * </PRE><BR>
                 * @param aCompanyName the attribute value
                 * @param aCompanyType the attribute value
35
                 * @param aAddress1 the attribute value
                 * @param aCity the attribute value
                 * @param aState the attribute value
                 * @param aPostalCode the attribute value
                 * @param aCountryCode the attribute value
40
                 * @param aPhone the attribute value
                 * @param aCustomerPassword the attribute value

    * @param aAuthQuestion the attribute value

                * @param aAuthAnswer the attribute value

    * @param aLegalContactFirstName the attribute value

45
                * @param aLegalContactLastName the attribute value
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
50
                 * @see NSIWholesaleAPI#COMMAND_CREATE
                * @see NSIWholesaleAPI#CLASS_BUSINESS_ACCOUNT
                 * @see NSIWholesaleAPI#COMBO_CREATE BUSINESS ACCOUNT
                * @see NSIWholesaleAPI#ATTR_COMPANY_NAME
                * @see NSIWholesaleAPI#ATTR_COMPANY_TYPE
55
                 * @see NSIWholesaleAPI#ATTR_ADDRESS1
                  @see NSIWholesaleAPI#ATTR_CITY
                  @see NSIWholesaleAPI#ATTR_STATE
```

```
aCustomerPassword,
                            aAuthQuestion,
                            aAuthAnswer,
                            aLegalContactFirstName, .
 5
                            aLegalContactLastName,
                            aState,
                            aPostalCode,
                            optionalAttributes,
10
               protected WSPResponse createBusinessAccount(
                      String aCompanyName,
                      String aCompanyType,
                     String aAddress1,
15
                      String aCity,
                      String aCountryCode,
                      String aPhone,
                      String aCustomerPassword,
                     String aAuthQuestion,
20
                     String aAuthAnswer,
                     String aLegalContactFirstName,
                     String aLegalContactLastName,
                     String aState,
                     String aPostalCode,
25
                     Properties optionalAttributes,
                      int count)
               throws NSIWholesaleException {
                     String methodName = className + ".createBusinessAccount(StringX13,
         Properties, int) ";
30
                      if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
35
                     WSPResponse returnCode;
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
40
                            // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(ATTR COMPANY NAME, aCompanyName);
45
                           allParmsAndAttrs.put(ATTR_COMPANY_TYPE, aCompanyType);
                            allParmsAndAttrs.put(ATTR ADDRESS1, aAddress1);
                            allParmsAndAttrs.put(ATTR CITY, aCity);
                            allParmsAndAttrs.put(ATTR_COUNTRY_CODE, aCountryCode);
                            allParmsAndAttrs.put(ATTR_PHONE, aPhone);
50 -
                           allParmsAndAttrs.put(ATTR_CUSTOMER_PASSWORD,
         aCustomerPassword);
                            allParmsAndAttrs.put(ATTR_AUTH_QUESTION, aAuthQuestion);
                           allParmsAndAttrs.put(ATTR_AUTH_ANSWER, aAuthAnswer);
                           allParmsAndAttrs.put(ATTR LEGAL CONTACT FIRST NAME,
55
         aLegalContactFirstName);
                           allParmsAndAttrs.put(ATTR_LEGAL_CONTACT_LAST_NAME,
         aLegalContactLastName);
```

```
* @see NSIWholesaleAPI#ATTR_POSTAL_CODE
                  @see NSIWholesaleAPI#ATTR_COUNTRY_CODE
                  @see NSIWholesaleAPI#ATTR_PHONE
                  @see NSIWholesaleAPI#ATTR_CUSTOMER_PASSWORD
 5
                  @see NSIWholesaleAPI#ATTR_AUTH_QUESTION
                  @see NSIWholesaleAPI#ATTR_AUTH_ANSWER
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FIRST_NAME
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_LAST_NAME
10
                  @see NSIWholesaleAPI#ATTR_ADDRESS2
                  @see NSIWholesaleAPI#ATTR_ADDRESS3
                  @see NSIWholesaleAPI#ATTR_ADDRESS4
                  @see NSIWholesaleAPI#ATTR_ADDRESS5

    * @see NSIWholesaleAPI#ATTR_EMAIL

15
                 * @see NSIWholesaleAPI#ATTR_FAX
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS1
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS2
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS3
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS4
20
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT ADDRESS5
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT CITY
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_STATE
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_POSTAL_CODE
                * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_COUNTRY_CODE
25
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_PHONE
                * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FAX
                * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_EMAIL
                * @see WSPResponse#INVALID VALUE
30
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
                * @see NSIWholesaleAPI#ATTR CUSTOMER ACCOUNT ID
35
               public WSPResponse createBusinessAccount(
                     String aCompanyName,
                     String aCompanyType,
                     String aAddress1,
                     String aCity,
40
                     String aCountryCode,
                     String aPhone,
                     String aCustomerPassword,
                     String aAuthQuestion,
                     String aAuthAnswer,
45
                     String aLegalContactFirstName,
                     String aLegalContactLastName,
                     String aState,
                     String aPostalCode,
                     Properties optionalAttributes)
50
               throws NSIWholesaleException {
                     return createBusinessAccount(
                           aCompanyName,
                           aCompanyType,
                           aAddress1,
55
                           aCity,
                           aCountryCode,
                           aPhone,
```

```
allParmsAndAttrs.put(ATTR_STATE, aState);
                            allParmsAndAttrs.put(ATTR_POSTAL_CODE, aPostalCode);
                            returnCode = conn.makeRequest(COMBO_CREATE_BUSINESS_ACCOUNT,
 5
         allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
                      } catch (Exception e) {
                            trý {
10
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
15
                            finally {
                                  return createBusinessAccount (
                                        aCompanyName,
                                        aCompanyType,
20
                                        aAddress1,
                                        aCity,
                                        aCountryCode,
                                        aPhone,
                                        aCustomerPassword,
25
                                        aAuthQuestion,
                                        aAuthAnswer,
                                        aLegalContactFirstName,
                                        aLegalContactLastName,
                                        aState,
30
                                        aPostalCode,
                                        optionalAttributes,
                                        count + 1);
35
                  This method creates a technical contact and returns an
40
                  automatically generated technical contact id (NIC Handle).
                  <BR><PRE>
                      Expected Major Result Code:
         COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
                     Expected Result Property Key(s) Returned:
45
                           ATTR TECH CONTACT ID
                  </PRE><BR>
                 * @param aFirstName the attribute value
                 * @param aLastName the attribute value
                * @param aOrganization the attribute value
50
                 * @param aAddress1 the attribute value
                 * @param aCountryCode the attribute value
                * @param aPhone the attribute value
                 * @param aEmail the attribute value
                * @param aTechContactPassword the attribute value
55
                * @param aCity the attribute value
                 * @return the Wholesale Server Protocol Server response
```

```
* @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND CREATE
                 * @see NSIWholesaleAPI#CLASS_TECHNICAL_CONTACT
 5
                 * @see NSIWholesaleAPI#COMBO_CREATE TECHNICAL CONTACT
                 * @see NSIWholesaleAPI#ATTR_FIRST_NAME
                 * @see NSIWholesaleAPI#ATTR_LAST_NAME
                 * @see NSIWholesaleAPI#ATTR_ORGANIZATION
                 * @see NSIWholesaleAPI#ATTR ADDRESS1
10
                 * @see NSIWholesaleAPI#ATTR_COUNTRY_CODE
                 * @see NSIWholesaleAPI#ATTR_PHONE
                 * @see NSIWholesaleAPI#ATTR_EMAIL
                 * @see NSIWholesaleAPI#ATTR_TECH_CONTACT PASSWORD
                  @see NSIWholesaleAPI#ATTR_CITY
15
                * @see NSIWholesaleAPI#ATTR STATE
                 * @see NSIWholesaleAPI#ATTR POSTAL CODE
                  @see NSIWholesaleAPI#ATTR_FAX
20
                * @see WSPResponse#INVALID VALUE
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
                * @see NSIWholesaleAPI#ATTR TECH CONTACT ID
25
               public WSPResponse createTechnicalContact(
                     String aFirstName,
                     String aLastName,
                     String aOrganization,
30
                     String aAddress1,
                     String aCountryCode,
                     String aPhone,
                     String aEmail,
                     String aTechContactPassword,
35
                     String aCity)
               throws NSIWholesaleException {
                     return createTechnicalContact(
                           aFirstName,
                            aLastName,
40
                            aOrganization,
                            aAddress1,
                            aCountryCode,
                           aPhone,
                            aEmail,
45
                            aTechContactPassword,
                            aCity,
                           new Properties(),
50
                * This method creates a technical contact and returns an
                  automatically generated technical contact id (NIC Handle).
                  <BR><PRE>
                     Optional Attribute Key(s):
55
                           ATTR FAX
```

```
Expected Result Property Key(s) Returned:
                           ATTR_TECH_CONTACT_ID
5
                * </PRE><BR>
                  @param aFirstName the attribute value

    * @param aLastName the attribute value

                 * @param aOrganization the attribute value
                  @param aAddress1 the attribute value
10
                  @param aCountryCode the attribute value
                  @param aPhone the attribute value
                  @param aEmail the attribute value
                  @param aTechContactPassword the attribute value
                  @param aCity the attribute value
15
                  @param optionalAttributes a property list of optional attributes
                  Oreturn the Wholesale Server Protocol Server response
                  @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                  @see NSIWholesaleAPI#COMMAND CREATE
20
                  @see NSIWholesaleAPI#CLASS_TECHNICAL_CONTACT
                  @see NSIWholesaleAPI#COMBO_CREATE_TECHNICAL_CONTACT
                  @see NSIWholesaleAPI#ATTR_FIRST_NAME
                  @see NSIWholesaleAPI#ATTR_LAST_NAME
                  @see NSIWholesaleAPI#ATTR_ORGANIZATION
25
                  @see NSIWholesaleAPI#ATTR_ADDRESS1
                  @see NSIWholesaleAPI#ATTR COUNTRY CODE
                  @see NSIWholesaleAPI#ATTR_PHONE
                  @see NSIWholesaleAPI#ATTR_EMAIL
                  @see NSIWholesaleAPI#ATTR_TECH_CONTACT_PASSWORD
30
                  @see NSIWholesaleAPI#ATTR_CITY
                  @see NSIWholesaleAPI#ATTR_STATE
                  @see NSIWholesaleAPI#ATTR_POSTAL_CODE
                  @see NSIWholesaleAPI#ATTR_FAX
35
                  @see WSPResponse#INVALID_VALUE
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
                * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
40
               public WSPResponse createTechnicalContact(
                     String aFirstName,
                     String aLastName,
45
                     String aOrganization,
                     String aAddress1,
                     String aCountryCode,
                     String aPhone,
                     String aEmail,
50
                     String aTechContactPassword,
                     String aCity,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return createTechnicalContact(
55
                           aFirstName,
                           aLastName,
                           aOrganization,
```

Expected Major Result Code:
COMMAND EXECUTION SUCCEEDED PROPERTIES_BEING_RETURNED

```
aAddress1,
                          aCountryCode,
                          aPhone,
                          aEmail,
5
                          aTechContactPassword,
                          aCity,
                          optionalAttributes,
10
              protected WSPResponse createTechnicalContact(
                    String aFirstName,
                    String aLastName,
                    String aOrganization,
                    String aAddress1,
15
                    String aCountryCode,
                    String aPhone,
                    String aEmail,
                    String aTechContactPassword,
                    String aCity,
20
                    Properties optionalAttributes,
                     int count)
              throws NSIWholesaleException {
                     String methodName = className + ".createTechnicalContact(StringX9,
         Properties, int) ";
25
                     if (count > retry) {
                          throw new NSIWholesaleException (methodName + "Unable to
         complete command");
                    NSIWholesaleConnection conn = null;
30
                    WSPResponse returnCode;
                     try {
                           Properties allParmsAndAttrs = new Properties();
35
                           // put optional attributes
                          propertiesCat(allParmsAndAttrs, optionalAttributes);
                          allParmsAndAttrs.put(ATTR FIRST NAME, aFirstName);
40
                          allParmsAndAttrs.put(ATTR_LAST_NAME, aLastName);
                           allParmsAndAttrs.put(ATTR_ORGANIZATION, aOrganization);
                           allParmsAndAttrs.put(ATTR_ADDRESS1, aAddress1);
                           allParmsAndAttrs.put(ATTR_COUNTRY_CODE, aCountryCode);
                           allParmsAndAttrs.put(ATTR_PHONE, aPhone);
45
                           allParmsAndAttrs.put(ATTR_EMAIL, aEmail);
                           allParmsAndAttrs.put(ATTR_TECH_CONTACT_PASSWORD,
         aTechContactPassword);
                          allParmsAndAttrs.put(ATTR_CITY, aCity);
50
                          returnCode =
         conn.makeRequest(COMBO_CREATE_TECHNICAL_CONTACT, allParmsAndAttrs);
                          pool.checkIn(conn);
                          return returnCode;
                     } catch (Exception e) {
55
                           try {
                                pool.release(conn);
```

```
catch (ResourceException re) {
                                 System.err.println(methodName + "Caught
         ResourceException" + re);
 5
                           return createTechnicalContact(
                                       aFirstName,
                                       aLastName,
                                       aOrganization,
10
                                       aAddress1,
                                       aCountryCode,
                                       aPhone,
                                       aEmail,
                                        aTechContactPassword,
15
                                       optionalAttributes,
                                       count + 1);
20
                  This method creates a technical contact and returns an
                  automatically generated technical contact id (NIC Handle).
25
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR_TECH CONTACT_ID
30
                * </PRE><BR>
                * @param aFirstName the attribute value
                * @param aLastName the attribute value
                * @param aOrganization the attribute value

    * @param aAddress1 the attribute value

                * @param aCountryCode the attribute value
35
                * @param aPhone the attribute value
                * @param aEmail the attribute value
                * @param aTechContactPassword the attribute value
                 * @param aCity the attribute value
40
                * @param aState the attribute value
                * @param aPostalCode the attribute value
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
45
                * @see NSIWholesaleAPI#COMMAND_CREATE
                * @see NSIWholesaleAPI#CLASS TECHNICAL CONTACT
                * @see NSIWholesaleAPI#COMBO CREATE TECHNICAL CONTACT
                * @see NSIWholesaleAPI#ATTR_FIRST_NAME
                * @see NSIWholesaleAPI#ATTR_LAST_NAME
50
                * @see NSIWholesaleAPI#ATTR_ORGANIZATION
                * @see NSIWholesaleAPI#ATTR_ADDRESS1
                * @see NSIWholesaleAPI#ATTR_COUNTRY_CODE
                * @see NSIWholesaleAPI#ATTR_PHONE
                * @see NSIWholesaleAPI#ATTR_EMAIL
55
                 * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_PASSWORD
                 @see NSIWholesaleAPI#ATTR_CITY
                 @see NSIWholesaleAPI#ATTR_STATE
```

```
* @see NSIWholesaleAPI#ATTR_POSTAL_CODE
                  @see NSIWholesaleAPI#ATTR_FAX
5
                * @see WSPResponse#INVALID VALUE
                * @see
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
                * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
10
               public WSPResponse createTechnicalContact(
                     String aFirstName,
                     String aLastName,
                     String aOrganization,
15
                     String aAddress1,
                     String aCountryCode,
                     String aPhone,
                     String aEmail,
                     String aTechContactPassword,
20
                     String aCity,
                     String aState,
                     String aPostalCode)
               throws NSIWholesaleException {
                     return createTechnicalContact(
25
                           aFirstName,
                           aLastName,
                           aOrganization,
                           aAddress1,
                           aCountryCode,
30
                           aPhone,
                           aEmail,
                           aTechContactPassword,
                           aCity,
                           aState,
35
                           aPostalCode,
                           new Properties(),
                           0);
40
                  This method creates a technical contact and returns an
                  automatically generated technical contact id (NIC Handle).
                  <BR><PRE>
                     Optional Attribute Key(s):
                           ATTR FAX
45
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR_TECH_CONTACT_ID
50
                * </PRE><BR>
                  @param aFirstName the attribute value
                 * @param aLastName the attribute value
                * @param aOrganization the attribute value
                * @param aAddress1 the attribute value
55
                  @param aCountryCode the attribute value
                  @param aPhone the attribute value
                  @param aEmail the attribute value
```

```
* @param aTechContactPassword the attribute value
                   @param aCity the attribute value
                   @param aState the attribute value

    * @param aPostalCode the attribute value

    * @param optionalAttributes a property list of optional attributes

                  * @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
          unable to complete command
                 * @see NSIWholesaleAPI#COMMAND_CREATE
10
                 * @see NSIWholesaleAPI#CLASS_TECHNICAL_CONTACT
                  * @see NSIWholesaleAPI#COMBO_CREATE_TECHNICAL_CONTACT
                 * @see NSIWholesaleAPI#ATTR_FIRST_NAME
                 * @see NSIWholesaleAPI#ATTR_LAST_NAME
                 * @see NSIWholesaleAPI#ATTR_ORGANIZATION
15
                 * @see NSIWholesaleAPI#ATTR ADDRESS1
                 * @see NSIWholesaleAPI#ATTR COUNTRY CODE
                 * @see NSIWholesaleAPI#ATTR PHONE
                 * @see NSIWholesaleAPI#ATTR EMAIL
                 * @see NSIWholesaleAPI#ATTR TECH CONTACT PASSWORD
-20
                  * @see NSIWholesaleAPI#ATTR CITY
                 * @see NSIWholesaleAPI#ATTR STATE
                 * @see NSIWholesaleAPI#ATTR POSTAL CODE
                   @see NSIWholesaleAPI#ATTR_FAX
25
                   @see WSPResponse#INVALID_VALUE
          WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
                 * @see NSIWholesaleAPI#ATTR_TECH_CONTACT ID
30
                public WSPResponse createTechnicalContact(
                      String aFirstName,
                      String aLastName,
35
                      String aOrganization,
                      String aAddress1,
                      String aCountryCode,
                      String aPhone,
                      String aEmail,
40
                      String aTechContactPassword,
                      String aCity,
                      String aState,
                      String aPostalCode,
                      Properties optionalAttributes)
45
                throws NSIWholesaleException {
                      return createTechnicalContact(
                            aFirstName,
                            aLastName,
                            aOrganization,
50
                            aAddress1,
                            aCountryCode,
                            aPhone,
                            aEmail,
                            aTechContactPassword,
55
                            aCity,
                            aState,
                            aPostalCode,
```

```
optionalAttributes,
               protected WSPResponse createTechnicalContact(
                     String aFirstName,
                     String aLastName,
                     String aOrganization,
                     String aAddress1,
                     String aCountryCode,
10
                     String aPhone,
                     String aEmail,
                     String aTechContactPassword,
                     String aCity,
                     String aState,
15
                     String aPostalCode,
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
                     String methodName = className +
20
         ".createTechnicalContact(StringX11, Properties, int) ";
                     if (count > retry) {
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
25
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
                     try {
                           conn = (NSIWholesaleConnection)pool.checkOut();
30
                           Properties allParmsAndAttrs = new Properties();
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
35
                           allParmsAndAttrs.put(ATTR_FIRST_NAME, aFirstName);
                           allParmsAndAttrs.put(ATTR_LAST_NAME, aLastName);
                           allParmsAndAttrs.put(ATTR_ORGANIZATION, aOrganization);
                           allParmsAndAttrs.put(ATTR_ADDRESS1, aAddress1);
                           allParmsAndAttrs.put(ATTR_COUNTRY_CODE, aCountryCode);
40
                           allParmsAndAttrs.put(ATTR_PHONE, aPhone);
                           allParmsAndAttrs.put(ATTR_EMAIL, aEmail);
                           allParmsAndAttrs.put(ATTR_TECH_CONTACT PASSWORD,
         aTechContactPassword);
                           allParmsAndAttrs.put(ATTR_CITY, aCity);
45
                           allParmsAndAttrs.put(ATTR_STATE, aState);
                           allParmsAndAttrs.put(ATTR_POSTAL_CODE, aPostalCode);
                           returnCode =
         conn.makeRequest(COMBO_CREATE_TECHNICAL_CONTACT, allParmsAndAttrs);
50
                           pool.checkIn(conn);
                           return returnCode;
                     } catch (Exception e) {
                           try {
                                 pool.release(conn);
55
                           catch (ResourceException re) {
```

```
System.err.println(methodName + "Caught
         ResourceException" + re);
                           finally {
 5
                                  return createTechnicalContact(
                                        aFirstName,
                                        aLastName,
                                        aOrganization,
                                        aAddress1,
10
                                        aCountryCode,
                                        aPhone,
                                        aEmail,
                                        aTechContactPassword,
                                        aCity,
15
                                        aState,
                                        aPostalCode,
                                        optionalAttributes,
                                        count + 1);
20
25
                  This method registers a new domain product for an existing
                  customer account. This request assumes that the domain
                  name will be hosted by some organization other than
                  Network Solutions.
                 <BR>NOTE: This command is asynchronous. Receipt of the
30
                * COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED code
                 indicates that the command has been successfully queued.
                * <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
35
                     Expected Result Property Key(s) Returned:
                           ATTR_ISP_PASSWORD
                 </PRE><BR>
                  @param pCustomerAccountId the parameter value
                  @param pCustomerPassword the parameter value
40
                  @param aDomainName the attribute value
                  @param aHostName1 the attribute value
                 @param aHostAddr1 the attribute value
                 @param aHostName2 the attribute value
                 @param aHostAddr2 the attribute value
45
                  @param aTechContactId the attribute value
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND CREATE
50
                * @see NSIWholesaleAPI#CLASS DOMAIN
                * @see NSIWholesaleAPI#COMBO_CREATE_DOMAIN
                * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                * @see NSIWholesaleAPI#ATTR DOMAIN NAME
55
                * @see NSIWholesaleAPI#ATTR HOST NAME1
                * @see NSIWholesaleAPI#ATTR_HOST_ADDR1
                 @see NSIWholesaleAPI#ATTR_HOST_NAME2
```

```
* @see NSIWholesaleAPI#ATTR_HOST_ADDR2
                   @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
                   @see WSPResponse#COMMAND_FAILED_UNKNOWN_ERROR
 5
                   @see WSPResponse#GENERAL_ACCESS_DENIED
                   @see WSPResponse#INVALID_VALUE
          WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                 * @see NSIWholesaleAPI#ATTR_ISP_PASSWORD
10
                public WSPResponse createDomain(
                      String pCustomerAccountId,
                      String pCustomerPassword,
15
                      String aDomainName,
                      String aHostNamel,
                      String aHostAddr1,
                      String aHostName2,
                      String aHostAddr2,
20
                      String aTechContactId
                throws NSIWholesaleException {
                      return createDomain(
                            pCustomerAccountId,
25
                            pCustomerPassword,
                            aDomainName,
                            aHostName1,
                            aHostAddr1,
                            aHostName2,
30
                            aHostAddr2,
                            aTechContactId,
                            new Properties(),
                            0);
35

    This method registers a new domain product for an existing

                  customer account. This request assumes that the domain
                  name will be hosted by some organization other than
                  Network Solutions.
40
                  <BR>NOTE: This command is asynchronous. Receipt of the
                  COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED code
                  indicates that the command has been successfully queued.
                  <BR><PRE>
                      Expected Major Result Code:
45
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
                      Expected Result Property Key(s) Returned:
                            ATTR_ISP_PASSWORD
                  </PRE><BR>
                  @param pCustomerAccountId the parameter value
50
                  @param pCustomerPassword the parameter value
                  @param aDomainName the attribute value
                  @param aHostName1 the attribute value
                  @param aHostAddrl the attribute value
                  @param aHostName2 the attribute value
55
                  @param aHostAddr2 the attribute value
                  @param aTechContactId the attribute value
                  @param optionalAttributes a property list of optional attributes
```

```
* @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND CREATE
 5
                 * @see NSIWholesaleAPI#CLASS DOMAIN
                 * @see NSIWholesaleAPI#COMBO_CREATE DOMAIN
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                  @see NSIWholesaleAPI#ATTR_DOMAIN_NAME
10
                 * @see NSIWholesaleAPI#ATTR_HOST_NAME1
                 * @see NSIWholesaleAPI#ATTR_HOST_ADDR1
                 * @see NSIWholesaleAPI#ATTR_HOST_NAME2
                 * @see NSIWholesaleAPI#ATTR_HOST_ADDR2
                  @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
15
                * @see WSPResponse#COMMAND_FAILED_UNKNOWN_ERROR
                * @see WSPResponse#GENERAL_ACCESS DENIED
                * @see WSPResponse#INVALID_VALUE
                * @see
20
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
                * @see NSIWholesaleAPI#ATTR_ISP_PASSWORD
               */
               public WSPResponse createDomain(
25
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     String aDomainName,
                     String aHostNamel,
                     String aHostAddrl,
30
                     String aHostName2,
                     String aHostAddr2,
                     String aTechContactId,
                     Properties:optionalAttributes)
               throws NSIWholesaleException {
35
                     return createDomain(
                            pCustomerAccountId,
                            pCustomerPassword,
                            aDomainName,
                            aHostName1.
40
                            aHostAddr1,
                            aHostName2.
                            aHostAddr2,
                            aTechContactId,
                            optionalAttributes, -
45
               protected WSPResponse createDomain(
                     String pCustomerAccountId,
                     String pCustomerPassword,
50
                     String aDomainName,
                     String aHostNamel,
                     String aHostAddrl,
                     String aHostName2,
                     String aHostAddr2,
55
                     String aTechContactId,
                     Properties optionalAttributes,
```

int count)

```
throws NSIWholesaleException {
                     int rc;
                     String methodName = className + ".createDomain(Stringx8,
         Properties, int) ";
                     System.out.println("*** Made it into createDomain...");
                     if (count > retry) {
                           rc = refundCard(pCustomerAccountId, aDomainName,
                                                 CreateDomainPrice, CreateDomainWNRP.
                                                 optionalAttributes);
10
                           throw new NSIWholesaleException(methodName + "Unable to
        complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
15
                       // Double check to see if the domain really is available (to
         minimize charges)
                       // with immediate credits
                       try {
                          System.out.println("***Attempting to verify domain is
20
         available.");
                          WSPResponse wspResponse = verifyDomainName( aDomainName);
                          if (wspResponse.getMajorResultCode() ==
         WSPResponse.COMMAND EXECUTION_SUCCEEDED NO_DATA_BEING RETURNED) {
25
                             // See if credit card information is available, if so get
         transaction
                             System.out.println("*** Begining to do Charge Card
         Validation.");
                               rc = ChargeCard(pCustomerAccountId, aDomainName,
30
                                                 CreateDomainPrice, CreateDomainWNRP,
                                                 optionalAttributes);
                               if (rc != 0) {
                                   // Bad credit card. Return bad code.
                              throw new NSIWholesaleException(methodName + "Credit card
35
         declined for: " +
                                                            aDomainName);
                              } else {
                                 // Domain name not available. Return bad code.
40
                           throw new NSIWholesaleException(methodName + "Domain name
         not available: "+
                                                            aDomainName);
45
                         catch (NSIWholesaleException e) {
                           throw new NSIWholesaleException("Domain name previously
         taken:" + aDomainName);
                         // All o.k. create the domain.
50
                         System.out.println("*** After the credit card interaction,
         going on to create a name.");
                           conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
55
                          . // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
```

```
allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
         pCustomerAccountId);
                            allParmsAndAttrs.put(PARM CUSTOMER PASSWORD,
 5
         pCustomerPassword);
                            allParmsAndAttrs.put(ATTR_DOMAIN_NAME, aDomainName);
                            allParmsAndAttrs.put(ATTR_HOST_NAME1, aHostName1);
                            allParmsAndAttrs.put(ATTR_HOST_ADDR1, aHostAddr1);
                            allParmsAndAttrs.put(ATTR_HOST_NAME2, aHostName2);
10
                            allParmsAndAttrs.put(ATTR_HOST_ADDR2, aHostAddr2);
                            allParmsAndAttrs.put(ATTR_TECH_CONTACT_ID, aTechContactId);
                           returnCode = conn.makeRequest (COMBO CREATE DOMAIN,
         allParmsAndAttrs);
15
                           pool.checkIn(conn);
                            return returnCode;
                      } catch (Exception e) {
                           try {
                                 pool.release(conn);
20
                           catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
25
                           finally {
                                 return createDomain(
                                        pCustomerAccountId,
                                        pCustomerPassword,
                                        aDomainName.
30
                                        aHostName1.
                                        aHostAddr1,
                                        aHostName2,
                                        aHostAddr2,
                                        aTechContactId,
35
                                        optionalAttributes,
                                        count + 1);
40
                  This method registers a new domain product for an existing
                  customer account. This request assumes that the domain
                  name will be hosted by some organization other than
45
                  Network Solutions.
                  <BR>NOTE: This command is asynchronous. Receipt of the
                  COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED code
                  indicates that the command has been successfully queued.
                  <BR><PRE>
50
                     Expected Major Result Code:
         COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR ISP_PASSWORD
                  </PRE><BR>
55
                  @param pCustomerAccountId the parameter value
                  @param pCustomerPassword the parameter value
                  @param aDomainName the attribute value
```

```
* @param aHostId1 the attribute value
                  @param aHostId2 the attribute value
                 * @param aTechContactId the attribute value
                 * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
 5
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_CREATE
                 * @see NSIWholesaleAPI#CLASS DOMAIN
                * @see NSIWholesaleAPI#COMBO CREATE DOMAIN
10
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT ID
                * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                * @see NSIWholesaleAPI#ATTR_DOMAIN NAME
                 * @see NSIWholesaleAPI#ATTR HOST ID1
                  @see NSIWholesaleAPI#ATTR_HOST_ID2
15
                  @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
                  @see WSPResponse#COMMAND_FAILED_UNKNOWN_ERROR
                  @see WSPResponse#GENERAL_ACCESS_DENIED
                  @see WSPResponse#INVALID_VALUE
20
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
                * @see NSIWholesaleAPI#ATTR_ISP_PASSWORD
25
               public WSPResponse createDomain(
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     String aDomainName,
                     String aHostId1,
30
                     String aHostId2,
                     String aTechContactId
               throws NSIWholesaleException {
                     return createDomain(
35
                          pCustomerAccountId,
                           pCustomerPassword,
                           aDomainName,
                           aHostId1,
                           aHostId2,
40
                           aTechContactId,
                           new Properties(),
45
                  This method registers a new domain product for an existing
                  customer account. This request assumes that the domain
                  name will be hosted by some organization other than
                  Network Solutions.
                  <BR>NOTE: This command is asynchronous. Receipt of the
50
                  COMMAND EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED code
                  indicates that the command has been successfully queued.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
55
                     Expected Result Property Key(s) Returned:
                           ATTR ISP_PASSWORD
                  </PRE><BR>
```

```
* @param pCustomerAccountId the parameter value
                   @param pCustomerPassword the parameter value
                   @param aDomainName the attribute value

    * @param aHostId1 the attribute value

  5
                  ' @param aHostId2 the attribute value
                   @param aTechContactId the attribute value
                  * @param optionalAttributes a property list of optional attributes
                   @return the Wholesale Server Protocol Server response
                  * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
 10
          unable to complete command
                  * @see NSIWholesaleAPI#COMMAND_CREATE
                  * @see NSIWholesaleAPI#CLASS_DOMAIN
                  * @see NSIWholesaleAPI#COMBO_CREATE_DOMAIN
                  * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
 15
                  * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                * @see NSIWholesaleAPI#ATTR_DOMAIN_NAME
                  * @see NSIWholesaleAPI#ATTR_HOST_ID1
                  * @see NSIWholesaleAPI#ATTR_HOST_ID2
                  * @see NSIWholesaleAPI#ATTR TECH_CONTACT_ID
..-20
                  * @see WSPResponse#COMMAND FAILED UNKNOWN ERROR
                  * @see WSPResponse#GENERAL ACCESS DENIED
                  * @see WSPResponse#INVALID_VALUE
                 * @see
25
          WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
                  * @see NSIWholesaleAPI#ATTR ISP PASSWORD
                public WSPResponse createDomain(
 30
                      String pCustomerAccountId,
                      String pCustomerPassword,
                      String aDomainName,
                      String aHostIdl,
                      String aHostId2,
 35
                      String aTechContactId,
                      Properties optionalAttributes)
                throws NSIWholesaleException {
                      return createDomain(
                            pCustomerAccountId,
40
                            pCustomerPassword,
                             aDomainName,
                            aHostId1,
                            aHostId2,
                            aTechContactId,
45
                            optionalAttributes,
                            0);
                protected WSPResponse createDomain(
                      String pCustomerAccountId,
50
                      String pCustomerPassword,
                      String aDomainName,
                      String aHostId1,
                      String aHostId2,
                      String aTechContactId,
55
                      Properties optionalAttributes,
                      int count)
                throws NSIWholesaleException {
```

```
String methodName = className + ".createDomain(StringX6,
         Properties, int) ";
                      if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
 5
         complete command");
                      NSIWholesaleConnection conn = null;
                      WSPResponse returnCode;
10
                      try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
15
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_CUSTOMER ACCOUNT ID,
         pCustomerAccountId);
                            allParmsAndAttrs.put(PARM CUSTOMER PASSWORD,
20
         pCustomerPassword);
                            allParmsAndAttrs.put(ATTR_DOMAIN_NAME, aDomainName);
                            allParmsAndAttrs.put(ATTR_HOST_ID1, aHostId1);
                            allParmsAndAttrs.put(ATTR_HOST_ID2, aHostId2);
                            allParmsAndAttrs.put(ATTR_TECH_CONTACT_ID, aTechContactId);
25
                            returnCode = conn.makeRequest(COMBO CREATE DOMAIN,
         allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
30
                      } catch (Exception e) {
                            try {
                                  pool.release(conn);
                            catch (ResourceException re) {
35
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
                            finally {
                                  return createDomain(
40
                                        pCustomerAccountid,
                                        pCustomerPassword,
                                        aDomainName,
                                        aHostId1,
                                        aHostId2,
45
                                        aTechContactId,
                                        optionalAttributes,
                                        count + 1);
50
                  This method registers a DNS Hosting product for an existing
                  customer account.
55
                  <BR>NOTE: This command is asynchronous. Receipt of the
                  COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED code
                  indicates that the command has been successfully queued.
```

```
* <BR><PRE>
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED PROPERTIES BEING RETURNED
                      Expected Result Property Key(s) Returned:
                            ATTR DNS HOSTING CREATED
                            ATTR ISP PASSWORD
                 * </PRE><BR>
                 * @param pCustomerAccountId the parameter value
                 * @param pCustomerPassword the parameter value
10 '
                 * @param aDomainName the attribute value
                 * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND_CREATE
15
                * @see NSIWholesaleAPI#CLASS_DNS_HOSTING
                 * @see NSIWholesaleAPI#COMBO_CREATE_DNS_HOSTING
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                * @see NSIWholesaleAPI#ATTR_DOMAIN_NAME
20
                 * @see WSPResponse#GENERAL_ACCESS_DENIED
                 * @see WSPResponse#INVALID_VALUE
                * @see
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
25
                * @see NSIWholesaleAPI#ATTR DNS HOSTING CREATED
                 * @see NSIWholesaleAPI#ATTR_ISP_PASSWORD
               public WSPResponse createDnsHosting(
30
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     String aDomainName)
               throws NSIWholesaleException {
                      return createDnsHosting(
35
                            pCustomerAccountId,
                            pCustomerPassword,
                            aDomainName,
                            new Properties(),
                            0);
40
                 * This method registers a DNS Hosting product for an existing
                * customer account.
                  <BR>NOTE: This command is asynchronous. Receipt of the
                 * COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED code
45
                  indicates that the command has been successfully queued.
                  <BR><PRE>
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
50
                     Expected Result Property Key(s) Returned:
                            ATTR_DNS_HOSTING_CREATED
                           ATTR_ISP_PASSWORD
                  </PRE><BR>
                  @param pCustomerAccountId the parameter value
55
                  @param pCustomerPassword the parameter value
```

@param optionalAttributes a property list of optional attributes

@param aDomainName the attribute value

```
* Oreturn the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND CREATE
 5
                * @see NSIWholesaleAPI#CLASS DNS HOSTING
                * @see NSIWholesaleAPI#COMBO CREATE DNS HOSTING
                 * @see NSIWholesaleAPI#PARM CUSTOMER ACCOUNT ID
                 * @see NSIWholesaleAPI#PARM CUSTOMER PASSWORD
                  @see NSIWholesaleAPI#ATTR_DOMAIN_NAME
10
                 * @see WSPResponse#GENERAL ACCESS DENIED
                  @see WSPResponse#INVALID VALUE
                  @see
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
15
                * @see NSIWholesaleAPI#ATTR_DNS_HOSTING_CREATED
                 * @see NSIWholesaleAPI#ATTR_ISP_PASSWORD
               public WSPResponse createDnsHosting(
20
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     String aDomainName,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
25
                     return createDnsHosting(
                           pCustomerAccountId,
                           pCustomerPassword,
                           aDomainName,
                           optionalAttributes,
30
                            0);
               protected WSPResponse createDnsHosting(
                     String pCustomerAccountId,
                     String pCustomerPassword,
35
                     String aDomainName,
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
                     String methodName = className + ".createDnsHosting(String, String,
40
         String, Properties, int) ";
                     if (count > retry) {
                           rc = refundCard(pCustomerAccountId, aDomainName,
                                                 CreateDnsHostPrice, CreateDnsHostWNRP,
                                                 optionalAttributes);
45
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
50
                        // Double check to see if the domain really is available (to
         minimize charges)
                       :// with immediate credits
                        try {
                           System.out.println("***Attempting to verify domain for DNS
- 55
         Hosting.");
                           WSPResponse wspResponse = verifyDomainName( aDomainName);
                           if (wspResponse.getMajorResultCode() ==
```

```
WSPResponse.COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED) {
                             // See if credit card information is available, if so get
         transaction
 5
                             System.out.println("*** Begining to do Charge Card
         Validation.");
                               rc = ChargeCard(pCustomerAccountId, aDomainName,
                                                 CreateDomainPrice, CreateDomainWNRP,
                                                 optionalAttributes);
10
                                if (rc != 0) {
                                    // Bad credit card. Return bad code.
                              throw new NSIWholesaleException(methodName + "Credit card
         declined for: " +
                                                            aDomainName);
15
                              } else {
                                  // Domain name not available. Return bad code.
                           throw new NSIWholesaleException(methodName + "Domain name
         not available: "+
20
                                                            aDomainName);
                         catch (NSIWholesaleException e) {
                           throw new NSIWholesaleException("Domain name previously
25
         taken:" + aDomainName);
                     try {
                           conn = (NSIWholesaleConnection)pool.checkOut();
30
                           Properties allParmsAndAttrs = new Properties();
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes):;
35
                           allParmsAndAttrs.put(PARM CUSTOMER ACCOUNT ID,
         pCustomerAccountId);
                            allParmsAndAttrs.put(PARM_CUSTOMER_PASSWORD,
         pCustomerPassword);
                           allParmsAndAttrs.put(ATTR_DOMAIN NAME, aDomainName);
40
                           returnCode = conn.makeRequest(COMBO_CREATE DNS HOSTING,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
45
                     } catch (Exception e) {
                           try {
                                  pool.release(conn);
                           catch (ResourceException re) {
50
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
                           finally {
                                  return createDnsHosting(
55
                                        pCustomerAccountId,
                                        pCustomerPassword,
                                        aDomainName,
```

}

optionalAttributes,
count + 1);

```
5
               }
                * This method allows a customer to modify one or more attributes
                  associated with a specific instance of a Domain product
10
                  registered to that customer.
                 * This method will also convert a DNS Hosting product domain
                  into a standard domain.
                  <BR>NOTE: This command is asynchronous. Receipt of the
                * COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED code
15
                * indicates that the command has been successfully queued.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND EXECUTION SUCCEEDED NO DATA BEING RETURNED
                * </PRE><BR>
20

    * @param pCustomerAccountId the parameter value

    * @param pCustomerPassword the parameter value

                * @param pDomainName the parameter value
                * @param aHostNamel the attribute value
                * @param aHostAddr1 the attribute value
25
                * @param aHostName2 the attribute value
                * @param aHostAddr2 the attribute value
                * @param aTechContactId the attribute value
                 @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
30
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND MODIFY
                * @see NSIWholesaleAPI#CLASS_DOMAIN
                * @see NSIWholesaleAPI#COMBO_MODIFY_DOMAIN
                * @see NSIWholesaleAPI#PARM CUSTOMER ACCOUNT ID
35
                * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                * @see NSIWholesaleAPI#PARM_DOMAIN_NAME
                * @see NSIWholesaleAPI#ATTR_HOST_NAME1
                * @see NSIWholesaleAPI#ATTR_HOST_ADDR1
                * @see NSIWholesaleAPI#ATTR_HOST_NAME2
40
                * @see NSIWholesaleAPI#ATTR_HOST_ADDR2
                * @see_NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
                * @see WSPResponse#COMMAND_FAILED_UNKNOWN_ERROR
                * @see WSPResponse#INVALID VALUE
45
                * @see WSPResponse#GENERAL_ACCESS_DENIED
                * @see WSPResponse#OBJECT_NOT_FOUND
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA BEING RETURNED
         WSPResponse#COMMAND EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
50
               public WSPResponse modifyDomain(
                     String pCustomerAccountId,
55
                     String pCustomerPassword,
                     String pDomainName,
                     String aHostNamel,
```

```
String aHostAddrl,
                     String aHostName2,
                     String aHostAddr2,
                     String aTechContactId
 5
               throws NSIWholesaleException {
                     return modifyDomain(
                           pCustomerAccountId,
                            pCustomerPassword,
10
                            pDomainName,
                            aHostName1,
                            aHostAddr1,
                            aHostName2,
                            aHostAddr2,
15
                            aTechContactId,
                           new Properties(),
                            0);
20
                  This method allows a customer to modify one or more attributes
                  associated with a specific instance of a Domain product
                  registered to that customer.
                  This method will also convert a DNS Hosting product domain
                  into a standard domain.
25
                  <BR>NOTE: This command is asynchronous. Receipt of the
                  COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED code
                  indicates that the command has been successfully queued.
                  <BR><PRE>
                     Expected Major Result Code:
30
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                * @param pCustomerAccountId the parameter value
                * @param pCustomerPassword the parameter value
                * @param pDomainName the parameter value
35
                 @param aHostName1 the attribute value
                 @param aHostAddrl the attribute value
                 * @param aHostName2 the attribute value
                * @param aHostAddr2 the attribute value
                * @param aTechContactId the attribute value
40
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND MODIFY
45
                * @see NSIWholesaleAPI#CLASS DOMAIN
                * @see NSIWholesaleAPI#COMBO MODIFY DOMAIN
                * @see NSIWholesaleAPI#PARM CUSTOMER ACCOUNT ID
                * @see NSIWholesaleAPI#PARM CUSTOMER PASSWORD
                * @see NSIWholesaleAPI#PARM_DOMAIN_NAME
50
                * @see NSIWholesaleAPI#ATTR_HOST_NAME1
                  @see NSIWholesaleAPI#ATTR HOST_ADDR1
                  @see NSIWholesaleAPI#ATTR HOST NAME2
                  @see NSIWholesaleAPI#ATTR HOST ADDR2
                  @see NSIWholesaleAPI#ATTR TECH_CONTACT ID
55
                  @see WSPResponse#COMMAND FAILED UNKNOWN ERROR
                  @see WSPResponse#INVALID VALUE
```

```
* @see WSPResponse#GENERAL_ACCESS_DENIED
                 * @see WSPResponse#OBJECT_NOT_FOUND
                 * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                 * @see
 5
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
                * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
                public WSPResponse modifyDomain(
10
                      String pCustomerAccountId,
                      String pCustomerPassword,
                      String pDomainName,
                      String aHostName1,
                      String aHostAddr1,
15
                      String aHostName2,
                      String aHostAddr2,
                      String aTechContactId,
                      Properties optionalAttributes)
                throws NSIWholesaleException {
20
                      return modifyDomain(
                            pCustomerAccountId,
                            pCustomerPassword,
                            pDomainName,
                            aHostName1,
25
                            aHostAddr1,
                            aHostName2,
                            aHostAddr2,
                            aTechContactId,
                            optionalAttributes,
30
               protected WSPResponse modifyDomain(
                      String pCustomerAccountId,
                      String pCustomerPassword,
35
                      String pDomainName,
                      String aHostNamel,
                      String aHostAddr1,
                      String aHostName2,
                      String aHostAddr2,
40
                      String aTechContactId,
                      Properties optionalAttributes,
                      int count)
               throws NSIWholesaleException {
                      String methodName = className + ".modifyDomain(StringX8,
45
         Properties, int) ";
                      if (count > retry) {
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
50
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
                      try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
55
                            Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
```

```
propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM CUSTOMER ACCOUNT ID.
         pCustomerAccountId);
 5 .
                            allParmsAndAttrs.put(PARM_CUSTOMER_PASSWORD,
         pCustomerPassword);
                            allParmsAndAttrs.put(PARM_DOMAIN_NAME, pDomainName);
                            allParmsAndAttrs.put(ATTR_HOST_NAME1, aHostName1);
                            allParmsAndAttrs.put(ATTR_HOST_ADDR1, aHostAddr1);
10
                            allParmsAndAttrs.put(ATTR_HOST_NAME2, aHostName2);
                            allParmsAndAttrs.put(ATTR_HOST_ADDR2, aHostAddr2);
                            allParmsAndAttrs.put(ATTR_TECH_CONTACT_ID, aTechContactId);
                            returnCode = conn.makeRequest(COMBO_MODIFY_DOMAIN,
15
         allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
                      } catch (Exception e) {
                           try {
20
                                  pool.release(conn);
                           catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
25
                           finally {
                                  return modifyDomain(
                                        pCustomerAccountId,
                                        pCustomerPassword,
30
                                        pDomainName,
                                        aHostName1,
                                        aHostAddr1,
                                        aHostName2,
                                        aHostAddr2,
35
                                        aTechContactId,
                                        optionalAttributes,
                                        count + 1);
40
                  This method allows a customer to modify one or more attributes
45
                  associated with a specific instance of a Domain product
                  registered to that customer.
                  This method will also convert a DNS Hosting product domain
                  into a standard domain.
                  <BR>NOTE: This command is asynchronous. Receipt of the
50
                  COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED code
                  indicates that the command has been successfully queued.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
55
                * </PRE><BR>
                  @param pCustomerAccountId the parameter value
                  @param pCustomerPassword the parameter value
```

```
* @param pDomainName the parameter value
                * @param aHostId1 the attribute value
                * @param aHostId2 the attribute value
                * @param aTechContactId the attribute value
5
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_MODIFY
                * @see NSIWholesaleAPI#CLASS_DOMAIN
10
                * @see NSIWholesaleAPI#COMBO MODIFY DOMAIN
                * @see NSIWholesaleAPI#PARM CUSTOMER ACCOUNT ID
                * @see NSIWholesaleAPI#PARM CUSTOMER PASSWORD
                * @see NSIWholesaleAPI#PARM DOMAIN NAME
                * @see NSIWholesaleAPI#ATTR HOST ID1
15
                * @see NSIWholesaleAPI#ATTR HOST ID2
                  @see NSIWholesaleAPI#ATTR_TECH_CONTACT ID
                * @see WSPResponse#COMMAND FAILED UNKNOWN ERROR
                  @see WSPResponse#INVALID_VALUE
20
                  @see WSPResponse#GENERAL_ACCESS_DENIED
                  @see WSPResponse#OBJECT_NOT_FOUND
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED .
25
                * @see NSIWholesaleAPI#ATTR TECH CONTACT ID
               public WSPResponse modifyDomain(:
                     String pCustomerAccountId,
30
                     String pCustomerPassword,
                     String pDomainName,
                     String aHostId1,
                     String aHostId2,
                     String aTechContactId
35
               throws NSIWholesaleException {
                     return modifyDomain(
                           pCustomerAccountId,
                           pCustomerPassword,
40
                           pDomainName,
                           aHostId1,
                           aHostId2,
                           aTechContactId,
                           new Properties(),
45
                  This method allows a customer to modify one or more attributes
                  associated with a specific instance of a Domain product
50
                  registered to that customer.
                  This method will also convert a DNS Hosting product domain
                  into a standard domain.
                  <BR>NOTE: This command is asynchronous. Receipt of the
                  COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED code
55
                  indicates that the command has been successfully queued.
                  <BR><PRE>
```

```
COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                  </PRE><BR>
                  Oparam pCustomerAccountId the parameter value
 5
                  @param pCustomerPassword the parameter value
                  @param pDomainName the parameter value
                  @param aHostId1 the attribute value
                  @param aHostId2 the attribute value
                  @param aTechContactId the attribute value
10
                  Oparam optionalAttributes a property list of optional attributes
                 * @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                  @see NSIWholesaleAPI#COMMAND MODIFY
15 ·
                  @see NSIWholesaleAPI#CLASS DOMAIN
                  @see NSIWholesaleAPI#COMBO_MODIFY_DOMAIN
                  @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                  @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                 * @see NSIWholesaleAPI#PARM DOMAIN NAME
20
                 * @see NSIWholesaleAPI#ATTR_HOST ID1
                 * @see NSIWholesaleAPI#ATTR_HOST_ID2
                 * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
                 * @see WSPResponse#COMMAND_FAILED_UNKNOWN ERROR
25
                 * @see WSPResponse#INVALID_VALUE
                 * @see WSPResponse#GENERAL_ACCESS_DENIED
                  @see WSPResponse#OBJECT_NOT_FOUND
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
30
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED PROPERTIES BEING RETURNED
                 * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
               public WSPResponse modifyDomain(
35
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     String pDomainName,
                     String aHostId1,
                     String aHostId2,
40
                     String aTechContactId,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return modifyDomain(
                           pCustomerAccountId,
45
                           pCustomerPassword,
                           pDomainName,
                           aHostId1,
                           aHostId2,
                           aTechContactId,
50
                           optionalAttributes,
               protected WSPResponse modifyDomain(
                     String pCustomerAccountId,
55
                     String pCustomerPassword,
                     String pDomainName,
                     String aHostId1,
```

Expected Major Result Code:

55

```
String aHostId2, .
                     String aTechContactId,
                     Properties optionalAttributes,
                     int count)
 5
               throws NSIWholesaleException {
                     String methodName = className + ".modifyDomain(StringX6,
         Properties, int) ";
                     if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
10
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
15
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
20
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                           allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT ID,
         pCustomerAccountId);
                            allParmsAndAttrs.put(PARM_CUSTOMER PASSWORD,
25
         pCustomerPassword);
                            allParmsAndAttrs.put(PARM_DOMAIN_NAME, pDomainName);
                           allParmsAndAttrs.put(ATTR_HOST_ID1, aHostId1);
                           allParmsAndAttrs.put(ATTR_HOST_ID2, aHostId2);
                            allParmsAndAttrs.put(ATTR_TECH_CONTACT_ID, aTechContactId);
30
                           returnCode = conn.makeRequest(COMBO_MODIFY DOMAIN,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
35
                      } catch (Exception e) {
                            try {
                                 pool.release(conn);
                           catch (ResourceException re) {
40
                                 System.err.println(methodName + "Caught
         ResourceException" + re);
                            finally {
                                 return modifyDomain(
45
                                        pCustomerAccountId,
                                        pCustomerPassword,
                                        pDomainName,
                                        aHostId1,
                                        aHostId2,
50
                                        aTechContactId,
                                        optionalAttributes,
                                        count + 1);
```

```
This method allows a technical contact of a customer's domain
                  product to modify one or more attributes

    associated with that specific instance of the Domain product

 5

    registered to that customer.

                 * This method will also convert a DNS Hosting product domain

    into a standard domain.

                 * <BR>NOTE: This command is asynchronous. Receipt of the
                 * COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED code
10
                * indicates that the command has been successfully queued.
                * <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                 @param pCustomerAccountId the parameter value
15
                  @param pTechContactId the parameter value
                  @param pTechContactPassword the parameter value
                  @param pDomainName the parameter value
                 @param aHostName1 the attribute value
20
                 @param aHostAddrl the attribute value
                 ' @param aHostName2 the attribute value
                 ' @param aHostAddr2 the attribute value
                 • @param aTechContactId the attribute value
                 * @param optionalAttributes a property list of optional attributes
25
                 * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_MODIFY
                * @see NSIWholesaleAPI#CLASS_DOMAIN
30
                * @see NSIWholesaleAPI#COMBO_MODIFY_DOMAIN
                * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                * @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
                * @see NSIWholesaleAPI#PARM_TECH_CONTACT_PASSWORD
                * @see NSIWholesaleAPI#PARM_DOMAIN_NAME
35
                * @see NSIWholesaleAPI#ATTR_HOST_NAME1
                * @see NSIWholesaleAPI#ATTR_HOST_ADDR1
                 * @see NSIWholesaleAPI#ATTR_HOST_NAME2
                * @see NSIWholesaleAPI#ATTR_HOST_ADDR2
                * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
40
                * @see WSPResponse#COMMAND_FAILED_UNKNOWN_ERROR
                * @see WSPResponse#INVALID_VALUE
                * @see WSPResponse#GENERAL_ACCESS_DENIED
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA BEING RETURNED
                * @see
45
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
               public WSPResponse modifyDomain(
50
                     String pCustomerAccountId,
                     String pTechContactId,
                     String pTechContactPassword,
                     String pDomainName,
                     String aHostNamel,
55
                     String aHostAddr1,
                     String aHostName2,
                     String aHostAddr2,
```

```
String aTechContactId
               throws NSIWholesaleException {
                     return modifyDomain(
 5
                            pCustomerAccountId,
                            pTechContactId,
                            pTechContactPassword,
                            pDomainName,
                            aHostNamel,
10
                            aHostAddr1,
                            aHostName2,
                            aHostAddr2,
                            aTechContactId,
                            new Properties(),
15
                  This method allows a technical contact of a customer's domain
                  product to modify one or more attributes
20
                  associated with that specific instance of the Domain product

    registered to that customer.

                 * This method will also convert a DNS Hosting product domain
                  into a standard domain.
                  <BR>NOTE: This command is asynchronous. Receipt of the
25
                 * COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED code
                 * indicates that the command has been successfully queued.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
30
                 * </PRE><BR>
                 * @param pCustomerAccountId the parameter value
                 * @param pTechContactId the parameter value

    * @param pTechContactPassword the parameter value

                 * @param pDomainName the parameter value
35
                 * @param aHostName1 the attribute value
                 * @param aHostAddrl the attribute value
                 * @param aHostName2 the attribute value
                 * @param aHostAddr2 the attribute value
                * @param aTechContactId the attribute value
40

    * @param optionalAttributes a property list of optional attributes

                 * @return the Wholesale Server Protocol Server response
               * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND MODIFY
45
                 * @see NSIWholesaleAPI#CLASS DOMAIN
                 * @see NSIWholesaleAPI#COMBO_MODIFY_DOMAIN
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                 * @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
                 * @see NSIWholesaleAPI#PARM_TECH_CONTACT_PASSWORD
50
                  @see NSIWholesaleAPI#PARM_DOMAIN_NAME
                  @see NSIWholesaleAPI#ATTR_HOST_NAME1
                  @see NSIWholesaleAPI#ATTR_HOST_ADDR1
                  @see NSIWholesaleAPI#ATTR_HOST_NAME2
                  @see NSIWholesaleAPI#ATTR_HOST_ADDR2
55
                  @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
                  @see WSPResponse#COMMAND_FAILED_UNKNOWN_ERROR
```

```
* @see WSPResponse#INVALID VALUE
                * @see WSPResponse#GENERAL ACCESS DENIED
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
               public WSPResponse modifyDomain(
                     String pCustomerAccountId,
10
                     String pTechContactId,
                     String pTechContactPassword,
                     String pDomainName,
                     String aHostNamel,
                     String aHostAddr1,
15
                     String aHostName2,
                     String aHostAddr2,
                     String aTechContactId,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
20
                     return modifyDomain(
                           pCustomerAccountId,
                           pTechContactId,
                           pTechContactPassword,
                           pDomainName,
25
                           aHostNamel,
                           aHostAddrl,
                           aHostName2,
                           aHostAddr2,
                           aTechContactId,
30
                            optionalAttributes,
                            0);
               protected WSPResponse modifyDomain(
                     String pCustomerAccountId,
35
                     String pTechContactId,
                     String pTechContactPassword,
                     String pDomainName,
                     String aHostNamel,
                     String aHostAddrl,
40
                     String aHostName2,
                     String aHostAddr2,
                     String aTechContactId,
                     Properties optionalAttributes,
                     int count)
45
               throws NSIWholesaleException {
                     String methodName = className + ".modifyDomain(StringX9,
         Properties, int) ";
                     if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
50
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
```

```
// put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                           allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT ID,
         pCustomerAccountId);
                           allParmsAndAttrs.put(PARM_TECH_CONTACT_ID, pTechContactId);
                           allParmsAndAttrs.put(PARM_TECH_CONTACT_PASSWORD,
         pTechContactPassword);
10
                           allParmsAndAttrs.put(PARM_DOMAIN_NAME, pDomainName);
                           allParmsAndAttrs.put(ATTR_HOST_NAME1, aHostName1);
                           allParmsAndAttrs.put(ATTR_HOST_ADDR1, aHostAddr1);
                           allParmsAndAttrs.put(ATTR_HOST_NAME2, aHostName2);
                           allParmsAndAttrs.put(ATTR_HOST_ADDR2, aHostAddr2);
15
                           allParmsAndAttrs.put(ATTR_TECH_CONTACT_ID, aTechContactId);
                           returnCode = conn.makeRequest(COMBO_MODIFY DOMAIN,
         allParmsAndAttrs);
                           -pool.checkIn(conn);
20
                           return returnCode;
                     } catch (Exception e) {
                           try {
                                 pool.release(conn);
25
                           catch (ResourceException re) {
                                 System.err.println(methodName + "Caught
         ResourceException" + re);
                           finally {
30
                                 return modifyDomain(
                                       pCustomerAccountId,
                                       pTechContactId,
                                       pTechContactPassword,
                                       pDomainName,
35
                                       aHostNamel,
                                       aHostAddr1,
                                       aHostName2,
                                       aHostAddr2,
                                       aTechContactId,
40
                                       optionalAttributes,
                                       count + 1);
45
                  This method allows a technical contact of a customer's domain
                  product to modify one or more attributes
50
                  associated with that specific instance of the Domain product
                  registered to that customer.
                  This method will also convert a DNS Hosting product domain
                  into a standard domain.
                  <BR>NOTE: This command is asynchronous. Receipt of the
55
                  COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED code
                 indicates that the command has been successfully queued.
                  <BR><PRE>
```

```
Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                 </PRE><BR>
                 .@param pCustomerAccountId the parameter value
                  @param pTechContactId the parameter value
                  @param pTechContactPassword the parameter value
                  @param pDomainName the parameter value
                * @param aHostId2 the attribute value
10
                * @param aTechContactId the attribute value
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_MODIFY
15
                * @see NSIWholesaleAPI#CLASS_DOMAIN
                * @see NSIWholesaleAPI#COMBO_MODIFY_DOMAIN
                * @see NSIWholesaleAPI#PARM_CUSTOMER ACCOUNT ID
                * @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
                * @see NSIWholesaleAPI#PARM_TECH_CONTACT_PASSWORD
20
                * @see NSIWholesaleAPI#PARM_DOMAIN NAME
                * @see NSIWholesaleAPI#ATTR_HOST_ID1
                * @see NSIWholesaleAPI#ATTR_HOST_ID2
                * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
25
                * @see WSPResponse#COMMAND_FAILED_UNKNOWN_ERROR
                * @see WSPResponse#INVALID_VALUE
                 @see WSPResponse#GENERAL_ACCESS_DENIED
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED NO DATA BEING RETURNED
                * @see
30
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
               */
               public WSPResponse modifyDomain(
                     String pCustomerAccountId,
35
                     String pTechContactId,
                     String pTechContactPassword,
                     String pDomainName,
                    String aHostId1,
                     String aHostId2,
40
                     String aTechContactId
               throws NSIWholesaleException {
                     return modifyDomain(
                           pCustomerAccountId,
45
                           pTechContactId,
                           pTechContactPassword,
                           pDomainName,
                           aHostId1,
                           aHostId2,
50
                           aTechContactId,
                           new Properties(),
55
                  This method allows a technical contact of a customer's domain
                  product to modify one or more attributes
                 associated with that specific instance of the Domain product
```

```
* registered to that customer.
                  This method will also convert a DNS Hosting product domain
                  into a standard domain.
                  <BR>NOTE: This command is asynchronous. Receipt of the
                 COMMAND EXECUTION SUCCEEDED PROPERTIES_BEING_RETURNED code
 5
                 * indicates that the command has been successfully queued.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
10
                 * </PRE><BR>
                * @param pCustomerAccountId the parameter value
                 * @param pTechContactId the parameter value
                  @param pTechContactPassword the parameter value
                 * @param pDomainName the parameter value
15

    * @param aHostId1 the attribute value

    * @param aHostId2 the attribute value

                 * @param aTechContactId the attribute value

    * @param optionalAttributes a property list of optional attributes

                * @return the Wholesale Server Protocol Server response
20
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_MODIFY
                 * @see NSIWholesaleAPI#CLASS_DOMAIN
                 * @see NSIWholesaleAPI#COMBO_MODIFY_DOMAIN
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
25
                 * @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
                * @see NSIWholesaleAPI#PARM_TECH_CONTACT_PASSWORD
                 * @see NSIWholesaleAPI#PARM_DOMAIN_NAME
                * @see NSIWholesaleAPI#ATTR_HOST_ID1
30
                 * @see NSIWholesaleAPI#ATTR_HOST_ID2
                 * @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
                * @see WSPResponse#COMMAND_FAILED_UNKNOWN_ERROR
                 * @see WSPResponse#INVALID_VALUE
35
                 * @see WSPResponse#GENERAL_ACCESS_DENIED
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
40
               */
               public WSPResponse modifyDomain(
                     String pCustomerAccountId,
                     String pTechContactId,
                      String pTechContactPassword,
45
                     String pDomainName,
                      String aHostId1,
                      String aHostId2;
                      String aTechContactId,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
50
                     return modifyDomain(
                            pCustomerAccountId,
                            pTechContactId,
                            pTechContactPassword,
55
                            pDomainName,
                            aHostId1,
                            aHostId2,
```

```
aTechContactId,
                             optionalAttributes,
                             0);
  5
                protected WSPResponse modifyDomain(
                       String pCustomerAccountId,
                       String pTechContactId,
                       String pTechContactPassword,
                       String pDomainName,
10
                      String aHostId1,
                      String aHostId2,
                      String aTechContactId,
                      Properties optionalAttributes,
                       int count)
 15
                throws NSIWholesaleException {
                      String methodName = className + ".modifyDomain(StringX7,
          Properties, int) ";
                      if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
20
          complete command");
                      NSIWholesaleConnection conn = null;
                      WSPResponse returnCode;
25
                      try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
30
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT ID,
          pCustomerAccountId);
                            allParmsAndAttrs.put(PARM_TECH_CONTACT_ID, pTechContactId);
35
                            allParmsAndAttrs.put(PARM_TECH_CONTACT_PASSWORD,
          pTechContactPassword);
                            allParmsAndAttrs.put(PARM_DOMAIN_NAME, pDomainName);
                            allParmsAndAttrs.put(ATTR_HOST_ID1, aHostId1);
                            allParmsAndAttrs.put(ATTR_HOST_ID2, aHostId2);
40
                            allParmsAndAttrs.put(ATTR_TECH_CONTACT_ID, aTechContactId);
                            returnCode = conn.makeRequest(COMBO MODIFY DOMAIN,
          allParmsAndAttrs);
                            pool.checkIn(conn);
45
                            return returnCode;
                      } catch (Exception e) {
                            try {
                                  pool.release(conn);
50
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
          ResourceException" + re);
                            finally {
55
                                  return modifyDomain(
                                        pCustomerAccountId,
                                         pTechContactId,
```

```
aHostId1,
                                        aHostId2,
                                        aTechContactId,
                                        optionalAttributes,
                                        count + 1);
10
                 * This method allows an Internet Service Provider (ISP)
15
                * to modify the Technical Contact Id of a specific domain product.
                * <BR>NOTE: This command is asynchronous. Receipt of the
                * COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED code

    indicates that the command has been successfully queued.

                  <BR><PRE>
20
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                * @param pCustomerAccountId the parameter value
                * @param pIspPassword the parameter value
25
                * @param pDomainName the parameter value
                * @param aTechContactId the attribute value
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
30
                * @see NSIWholesaleAPI#COMMAND MODIFY
                * @see NSIWholesaleAPI#CLASS DOMAIN
                * @see NSIWholesaleAPI#COMBO MODIFY DOMAIN
                * @see NSIWholesaleAPI#PARM_CUSTOMER ACCOUNT ID
                * @see NSIWholesaleAPI#PARM ISP PASSWORD
35
                * @see NSIWholesaleAPI#PARM DOMAIN NAME
                  @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
                * @see WSPResponse#INVALID_VALUE
                * @see WSPResponse#GENERAL_ACCESS_DENIED
40
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED NO DATA BEING RETURNED
               public WSPResponse modifyDomain(
                     String pCustomerAccountId,
45
                     String pIspPassword,
                     String pDomainName,
                     String aTechContactId
               throws NSIWholesaleException {
50
                     return modifyDomain(
                           pCustomerAccountId,
                           pIspPassword,
                           pDomainName,
                           aTechContactId,
55
                           new Properties(),
                           0);
```

pTechContactPassword,

pDomainName,

```
This method allows an Internet Service Provider (ISP)
                  to modify the Technical Contact Id of a specific domain product.
                * <BR>NOTE: This command is asynchronous. Receipt of the
                * COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED code
                 * indicates that the command has been successfully queued.
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
10
                * </PRE><BR>
                  @param pCustomerAccountId the parameter value
                  @param pIspPassword the parameter value
                  @param pDomainName the parameter value
                 * @param aTechContactId the attribute value
15

    eparam optionalAttributes a property list of optional attributes

                 * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND MODIFY
20
                * @see NSIWholesaleAPI#CLASS_DOMAIN
                * @see NSIWholesaleAPI#COMBO_MODIFY_DOMAIN
                * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                * @see NSIWholesaleAPI#PARM_ISP_PASSWORD
                * @see NSIWholesaleAPI#PARM_DOMAIN_NAME
25
                  @see NSIWholesaleAPI#ATTR_TECH_CONTACT_ID
                  @see WSPResponse#INVALID_VALUE
                  @see WSPResponse#GENERAL_ACCESS_DENIED
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED NO DATA BEING RETURNED
30
               public WSPResponse modifyDomain(
                     String pCustomerAccountId,
                     String pIspPassword,
35
                     String pDomainName,
                     String aTechContactId,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return modifyDomain(
40
                           pCustomerAccountId,
                           pIspPassword,
                           pDomainName,
                           aTechContactId,
                           optionalAttributes,
45
               protected WSPResponse modifyDomain(
                     String pCustomerAccountId,
                     String pIspPassword,
50
                     String pDomainName,
                     String aTechContactId,
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
55
                     String methodName = className + ".modifyDomain(StringX4,
         Properties,
                     int) ";
                     if (count > retry) {
```

```
throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
10
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM CUSTOMER ACCOUNT ID,
15
         pCustomerAccountId);
                           allParmsAndAttrs.put(PARM_ISP_PASSWORD, pIspPassword);
                           allParmsAndAttrs.put(PARM_DOMAIN_NAME, pDomainName);
                           allParmsAndAttrs.put(ATTR_TECH_CONTACT_ID, aTechContactId);
20
                           returnCode = conn.makeRequest(COMBO MODIFY DOMAIN,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
                     } catch (Exception e) {
25
                            try {
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
30
         ResourceException" + re);
                            finally {
                                  return modifyDomain(
                                        pCustomerAccountId,
35
                                        pIspPassword,
                                        pDomainName,
                                        aTechContactId,
                                        optionalAttributes,
                                        count + 1);
40
45
                  This method is used to modify one or more attributes
                  of an existing individual customer account.
                  <BR><PRE>
                     Expected Major Result Code:
50
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                * @param pCustomerAccountId the parameter value
                  @param pCustomerPassword the parameter value
                * @return the Wholesale Server Protocol Server response
55
                @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                  @see NSIWholesaleAPI#COMMAND_MODIFY
```

```
@see NSIWholesaleAPI#CLASS_INDIVIDUAL ACCOUNT
                  @see NSIWholesaleAPI#COMBO MODIFY INDIVIDUAL ACCOUNT
                  @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                  @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
 5
                  @see NSIWholesaleAPI#ATTR_CUSTOMER PASSWORD
                  @see NSIWholesaleAPI#ATTR FIRST NAME
                  @see NSIWholesaleAPI#ATTR LAST NAME
                  @see NSIWholesaleAPI#ATTR ADDRESS1
10
                 * @see NSIWholesaleAPI#ATTR ADDRESS2
                  @see NSIWholesaleAPI#ATTR_ADDRESS3
                  @see NSIWholesaleAPI#ATTR ADDRESS4

    * @see NSIWholesaleAPI#ATTR ADDRESS5

                 * @see NSIWholesaleAPI#ATTR CITY
15
                 * @see NSIWholesaleAPI#ATTR STATE
                  @see NSIWholesaleAPI#ATTR POSTAL CODE
                  @see NSIWholesaleAPI#ATTR_COUNTRY_CODE
                  @see NSIWholesaleAPI#ATTR_PHONE
                  @see NSIWholesaleAPI#ATTR_FAX
20
                  @see NSIWholesaleAPI#ATTR EMAIL
                  @see NSIWholesaleAPI#ATTR_AUTH_QUESTION
                  @see NSIWholesaleAPI#ATTR_AUTH_ANSWER
                  @see WSPResponse#GENERAL ACCESS DENIED
25
                  @see WSPResponse#INVALID VALUE
                 * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
               public WSPResponse modifyIndividualAccount(
.30
                     String pCustomerAccountId,
                     String pCustomerPassword)
               throws NSIWholesaleException {
                     return modifyIndividualAccount(
                            pCustomerAccountId,
35
                            pCustomerPassword,
                            new Properties(),
40
                  This method is used to modify one or more attributes
                  of an existing individual customer account.
                  <BR><PRE>
                     Optional Attribute Key(s):
                           ATTR CUSTOMER_PASSWORD
45
                            ATTR FIRST NAME
                           ATTR LAST NAME
                            ATTR ADDRESS1
                            ATTR ADDRESS2
                            ATTR ADDRESS3
50
                           ATTR_ADDRESS4
                           ATTR ADDRESS5
                           ATTR_CITY
                           ATTR STATE
                           ATTR_POSTAL_CODE
55
                           ATTR COUNTRY CODE
                           ATTR PHONE
                           ATTR_FAX
```

ATTR_EMAIL ATTR_AUTH_QUESTION ATTR_AUTH_ANSWER

```
5.
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING RETURNED
                 * </PRE><BR>
                  @param pCustomerAccountId the parameter value
                  @param pCustomerPassword the parameter value
10
                  @param optionalAttributes a property list of optional attributes
                  @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                  @see NSIWholesaleAPI#COMMAND MODIFY
15
                  @see NSIWholesaleAPI#CLASS_INDIVIDUAL_ACCOUNT
                  @see NSIWholesaleAPI#COMBO_MODIFY_INDIVIDUAL ACCOUNT
                  @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                  @see NSIWholesaleAPI#PARM_CUSTOMER PASSWORD
20
                  @see NSIWholesaleAPI#ATTR CUSTOMER PASSWORD
                  @see NSIWholesaleAPI#ATTR_FIRST_NAME
                  @see NSIWholesaleAPI#ATTR_LAST_NAME
                  @see NSIWholesaleAPI#ATTR_ADDRESS1
                  @see NSIWholesaleAPI#ATTR_ADDRESS2
25
                  @see NSIWholesaleAPI#ATTR_ADDRESS3
                  @see NSIWholesaleAPI#ATTR_ADDRESS4
                  @see NSIWholesaleAPI#ATTR_ADDRESS5
                  @see NSIWholesaleAPI#ATTR_CITY
                  @see NSIWholesaleAPI#ATTR_STATE
30
                  @see NSIWholesaleAPI#ATTR_POSTAL CODE
                 * @see NSIWholesaleAPI#ATTR_COUNTRY_CODE
                 * @see NSIWholesaleAPI#ATTR PHONE
                  @see NSIWholesaleAPI#ATTR_FAX
                  @see NSIWholesaleAPI#ATTR_EMAIL
35
                  @see NSIWholesaleAPI#ATTR_AUTH_QUESTION
                  @see NSIWholesaleAPI#ATTR AUTH ANSWER
                  @see WSPResponse#GENERAL ACCESS DENIED
                  @see WSPResponse#INVALID_VALUE
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING RETURNED
40
               public WSPResponse modifyIndividualAccount(
                     String pCustomerAccountId,
45
                     String pCustomerPassword,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return modifyIndividualAccount(
                           pCustomerAccountId,
50
                           pCustomerPassword,
                           optionalAttributes,
               protected WSPResponse modifyIndividualAccount(
55
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     Properties optionalAttributes,
```

```
int count)
                throws NSIWholesaleException {
                     String methodName = className + ".modifyIndividualAccount(String,
         String, Properties, int) ";
 5
                     if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
10
                     WSPResponse returnCode;
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
15
                            // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
20
         pCustomerAccountId);
                            allParmsAndAttrs.put(PARM_CUSTOMER_PASSWORD,
         pCustomerPassword);
                           returnCode =
25
         conm.makeRequest(COMBO_MODIFY_INDIVIDUAL_ACCOUNT, allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
                     } catch (Exception e) {
                            try {
30
                                  pool.release(conn);
                           catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
35
                            finally {
                                  return modifyIndividualAccount(
                                        pCustomerAccountId,
                                        pCustomerPassword,
40
                                        optionalAttributes,
                                        count + 1);
45
                  This method is used to modify one or more attributes
                  of an existing business (organization) customer account.
50
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND EXECUTION SUCCEEDED NO DATA BEING RETURNED
                * </PRE><BR>
                * @param pCustomerAccountId the parameter value
55
                  @param pCustomerPassword the parameter value
                  @return the Wholesale Server Protocol Server response
```

```
* @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                  @see NSIWholesaleAPI#COMMAND MODIFY
                  @see NSIWholesaleAPI#CLASS_BUSINESS ACCOUNT
 5
                  @see NSIWholesaleAPI#COMBO_MODIFY_BUSINESS_ACCOUNT
                  @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                  @see NSIWholesaleAPI#PARM CUSTOMER PASSWORD
                  @see NSIWholesaleAPI#ATTR_CUSTOMER_PASSWORD
10
                  @see NSIWholesaleAPI#ATTR_COMPANY_NAME
                  @see NSIWholesaleAPI#ATTR_COMPANY TYPE
                  @see NSIWholesaleAPI#ATTR_ADDRESS1
                  @see NSIWholesaleAPI#ATTR_ADDRESS2
                  @see NSIWholesaleAPI#ATTR_ADDRESS3
15
                  @see NSIWholesaleAPI#ATTR ADDRESS4
                  @see NSIWholesaleAPI#ATTR_ADDRESS5
                  @see NSIWholesaleAPI#ATTR CITY
                  @see NSIWholesaleAPI#ATTR STATE
                  @see NSIWholesaleAPI#ATTR POSTAL CODE
20
                  @see NSIWholesaleAPI#ATTR COUNTRY CODE
                  @see NSIWholesaleAPI#ATTR PHONE
                  @see NSIWholesaleAPI#ATTR FAX
                  @see NSIWholesaleAPI#ATTR_EMAIL
                  @see NSIWholesaleAPI#ATTR_AUTH_QUESTION
25
                  @see NSIWholesaleAPI#ATTR_AUTH_ANSWER
                  @see NSIWholesaleAPI#ATTR_LEGAL CONTACT FIRST NAME
                  @see NSIWholesaleAPI#ATTR_LEGAL CONTACT LAST NAME
                  @see NSIWholesaleAPI#ATTR LEGAL CONTACT ADDRESS1
                  @see NSIWholesaleAPI#ATTR_LEGAL CONTACT ADDRESS2
30
                  @see NSIWholesaleAPI#ATTR LEGAL CONTACT ADDRESS3
                  @see NSIWholesaleAPI#ATTR LEGAL CONTACT ADDRESS4
                  @see NSIWholesaleAPI#ATTR_LEGAL CONTACT ADDRESS5
                  @see NSIWholesaleAPI#ATTR_LEGAL CONTACT CITY
                  @see NSIWholesaleAPI#ATTR LEGAL CONTACT STATE
35
                  @see NSIWholesaleAPI#ATTR LEGAL CONTACT POSTAL CODE
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT COUNTRY CODE
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT PHONE
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FAX
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FAX
40
                  @see WSPResponse#GENERAL_ACCESS_DENIED
                  @see WSPResponse#INVALID VALUE
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA BEING RETURNED
45
               public WSPResponse modifyBusinessAccount (
                     String pCustomerAccountId,
                     String pCustomerPassword)
               throws NSIWholesaleException {
50
                     return modifyBusinessAccount(
                           pCustomerAccountId,
                           pCustomerPassword,
                           new Properties(),
                           0);
55
                  This method is used to modify one or more attributes
```

```
<BR><PRE>
                     Optional Attribute Key(s):
                            ATTR_CUSTOMER_PASSWORD
                            ATTR COMPANY NAME
                            ATTR COMPANY TYPE
                            ATTR ADDRESS1
                            ATTR ADDRESS2
                            ATTR ADDRESS3
10
                            ATTR ADDRESS4
                            ATTR ADDRESS5
                            ATTR CITY
                            ATTR STATE
                            ATTR_POSTAL_CODE
15
                            ATTR COUNTRY CODE
                            ATTR PHONE
                            ATTR_FAX
                            ATTR_EMAIL
                            ATTR_AUTH_QUESTION
20.
                            ATTR_AUTH_ANSWER
                            ATTR LEGAL CONTACT FIRST NAME
                            ATTR LEGAL CONTACT LAST NAME
                            ATTR_LEGAL_CONTACT_ADDRESS1
                            ATTR LEGAL CONTACT ADDRESS2
25
                            ATTR LEGAL CONTACT ADDRESS3
                            ATTR_LEGAL_CONTACT_ADDRESS4
                            ATTR_LEGAL_CONTACT_ADDRESS5
                           ATTR_LEGAL_CONTACT_CITY
                            ATTR_LEGAL_CONTACT_STATE
30
                            ATTR_LEGAL CONTACT_POSTAL CODE
                            ATTR LEGAL CONTACT COUNTRY CODE
                            ATTR_LEGAL_CONTACT_PHONE
                            ATTR_LEGAL_CONTACT_FAX
                           ATTR LEGAL_CONTACT_EMAIL
35
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                * @param pCustomerAccountId the parameter value
40
                  @param pCustomerPassword the parameter value
                  @param optionalAttributes a property list of optional attributes
                  Oreturn the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
45
                * @see NSIWholesaleAPI#COMMAND MODIFY
                * @see NSIWholesaleAPI#CLASS BUSINESS ACCOUNT
                * @see NSIWholesaleAPI#COMBO MODIFY BUSINESS ACCOUNT
                * @see NSIWholesaleAPI#PARM CUSTOMER ACCOUNT ID
                  @see NSIWholesaleAPI#PARM CUSTOMER PASSWORD
50
                  @see NSIWholesaleAPI#ATTR CUSTOMER PASSWORD
                  @see NSIWholesaleAPI#ATTR COMPANY NAME
                * @see NSIWholesaleAPI#ATTR COMPANY TYPE
                * @see NSIWholesaleAPI#ATTR ADDRESS1
55
                * @see NSIWholesaleAPI#ATTR ADDRESS2
                  @see NSIWholesaleAPI#ATTR ADDRESS3
                  @see NSIWholesaleAPI#ATTR ADDRESS4
```

of an existing business (organization) customer account.

```
* @see NSIWholesaleAPI#ATTR ADDRESS5
                 * @see NSIWholesaleAPI#ATTR_CITY
                 * @see NSIWholesaleAPI#ATTR_STATE
                 * @see NSIWholesaleAPI#ATTR_POSTAL_CODE
 5
                 * @see NSIWholesaleAPI#ATTR COUNTRY CODE
                 * @see NSIWholesaleAPI#ATTR_PHONE
                 * @see NSIWholesaleAPI#ATTR FAX
                 * @see NSIWholesaleAPI#ATTR_EMAIL
                 * @see NSIWholesaleAPI#ATTR_AUTH_QUESTION
10
                 * @see NSIWholesaleAPI#ATTR_AUTH_ANSWER
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FIRST_NAME
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_LAST_NAME
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS1
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS2
15
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS3
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS4
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_ADDRESS5
                 * @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_CITY
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_STATE
20
                  @see NSIWholesaleAPI#ATTR_LEGAL CONTACT POSTAL CODE
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_COUNTRY CODE
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_PHONE
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FAX
                  @see NSIWholesaleAPI#ATTR_LEGAL_CONTACT_FAX
25
                  @see WSPResponse#GENERAL_ACCESS DENIED
                  @see WSPResponse#INVALID_VALUE
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING RETURNED
30
               public WSPResponse modifyBusinessAccount(
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     Properties optionalAttributes)
35
               throws NSIWholesaleException {
                     return modifyBusinessAccount (
                           pCustomerAccountId,
                            pCustomerPassword,
                            optionalAttributes,
40
               protected WSPResponse modifyBusinessAccount(
                     String pCustomerAccountId,
                     String pCustomerPassword,
45
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
                     String methodName = className + ".modifyBusinessAccount(String,
         String, Properties, int) ";
50
                     if (count > retry) {
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
55
                     WSPResponse returnCode;
                     try {
```

```
conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
 5
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
         pCustomerAccountId)
                            allParmsAndAttrs.put(PARM_CUSTOMER_PASSWORD,
10
         pCustomerPassword);
                           returnCode = conn.makeRequest(COMBO_MODIFY_BUSINESS_ACCOUNT,
         allParmsAndAttrs);
                           pool.checkIn(conn);
15
                           return returnCode;
                     } catch (Exception e) {
                           try {
                                  pool.release(conn);
20
                           catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
                           finally {
25
                                  return modifyBusinessAccount (
                                        pCustomerAccountId,
                                        pCustomerPassword,
                                        optionalAttributes,
                                        count + 1);
30
35
                  This method is used to modify one or more attributes
                  of an existing technical contact.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND EXECUTION SUCCEEDED NO DATA BEING RETURNED
40
                 * </PRE><BR>
                  @param pTechContactId the parameter value
                  @param pTechContactPassword the parameter value
                  Oreturn the Wholesale Server Protocol Server response
                  @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
45
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND_MODIFY
                  @see NSIWholesaleAPI#CLASS_TECHNICAL_CONTACT
                * @see NSIWholesaleAPI#COMBO_MODIFY_TECHNICAL CONTACT
                  @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
50
                  @see NSIWholesaleAPI#PARM_TECH_CONTACT_PASSWORD
                  @see NSIWholesaleAPI#ATTR FIRST NAME
                  @see NSIWholesaleAPI#ATTR_LAST_NAME
                  @see NSIWholesaleAPI#ATTR_ORGANIZATION
55
                * @see NSIWholesaleAPI#ATTR_ADDRESS1
                  @see NSIWholesaleAPI#ATTR_CITY
                  @see NSIWholesaleAPI#ATTR_STATE
```

```
@see NSIWholesaleAPI#ATTR POSTAL CODE
                  @see NSIWholesaleAPI#ATTR COUNTRY_CODE
                  @see NSIWholesaleAPI#ATTR_PHONE
                  @see NSIWholesaleAPI#ATTR_FAX
 5
                  @see NSIWholesaleAPI#ATTR_EMAIL
                  @see WSPResponse#GENERAL_ACCESS_DENIED
                  @see WSPResponse#INVALID VALUE
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING RETURNED
10
               public WSPResponse modifyTechnicalContact(
                     String pTechContactId,
                     String pTechContactPassword)
15
               throws NSIWholesaleException {
                     return modifyTechnicalContact(
                           pTechContactId,
                           pTechContactPassword,
                           new Properties(),
20
                  This method is used to modify one or more attributes
                  of an existing technical contact.
25
                  <BR><PRE>
                     Optional Attribute Key(s):
                           ATTR FIRST NAME
                           ATTR LAST NAME
                           ATTR_ORGANIZATION
30
                           ATTR_ADDRESS1
                           ATTR_CITY
                           ATTR_STATE
                           ATTR_POSTAL_CODE
                           ATTR_COUNTRY_CODE
35
                           ATTR_EMAIL
                           ATTR_FAX
                           ATTR PHONE
                     Expected Major Result Code:
40
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                  @param pTechContactId the parameter value
                  @param pTechContactPassword the parameter value
                  @param optionalAttributes a property list of optional attributes
45
                  @return the Wholesale Server Protocol Server response
                  @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                  @see NSIWholesaleAPI#COMMAND MODIFY
                  @see NSIWholesaleAPI#CLASS TECHNICAL CONTACT
50
                  @see NSIWholesaleAPI#COMBO_MODIFY_TECHNICAL CONTACT
                  @see NSIWholesaleAPI#PARM TECH CONTACT ID
                  @see NSIWholesaleAPI#PARM_TECH_CONTACT PASSWORD
                  @see NSIWholesaleAPI#ATTR_FIRST_NAME
55
                  @see NSIWholesaleAPI#ATTR_LAST_NAME
                  @see NSIWholesaleAPI#ATTR_ORGANIZATION
                  @see NSIWholesaleAPI#ATTR_ADDRESS1
```

```
* @see NSIWholesaleAPI#ATTR CITY
                 * @see NSIWholesaleAPI#ATTR_STATE
                 * @see NSIWholesaleAPI#ATTR POSTAL CODE
                 * @see NSIWholesaleAPI#ATTR_COUNTRY_CODE
 5
                 * @see NSIWholesaleAPI#ATTR_PHONE
                 * @see NSIWholesaleAPI#ATTR_FAX
                  @see NSIWholesaleAPI#ATTR EMAIL
                  @see WSPResponse#GENERAL_ACCESS_DENIED
10
                  @see WSPResponse#INVALID_VALUE
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
               public WSPResponse modifyTechnicalContact(
                     String pTechContactId,
15
                     String pTechContactPassword,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return modifyTechnicalContact(
20
                            pTechContactId,
                            pTechContactPassword,
                            optionalAttributes,
                            0):
25
               protected WSPResponse modifyTechnicalContact(
                     String pTechContactId,
                     String pTechContactPassword,
                     Properties optionalAttributes,
                     int count)
30
               throws NSIWholesaleException {
                     String methodName = className + ".modifyTechnicalContact(String,
         String, Properties, int) ";
                     if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
35
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
40
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
45
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                           allParmsAndAttrs.put(PARM_TECH_CONTACT_ID, pTechContactId);
                           allParmsAndAttrs.put (PARM TECH CONTACT PASSWORD,
         pTechContactPassword);
50
                            returnCode =
         conn.makeRequest(COMBO_MODIFY_TECHNICAL_CONTACT, allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
55
                      } catch (Exception e) {
                            try {
                                  pool.release(conn);
```

```
catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
                           finally {
                                  return modifyTechnicalContact(
                                       pTechContactId,
                                        pTechContactPassword,
10
                                        optionalAttributes,
                                        count + 1);
15
                * This method is used to modify/reset a customer's account password.
                  <BR><PRE>
20
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                * @param pCustomerAccountId the parameter value
                  @param aCustomerPassword the attribute value
25
                  @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND MODIFY
                * @see NSIWholesaleAPI#CLASS PASSWORD
30
                  @see NSIWholesaleAPI#COMBO_MODIFY_PASSWORD
                  @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                  @see NSIWholesaleAPI#ATTR CUSTOMER PASSWORD
                  @see WSPResponse#GENERAL_ACCESS_DENIED
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
35
               public WSPResponse modifyPassword(
                     String pCustomerAccountId,
40
                     String aCustomerPassword)
               throws NSIWholesaleException {
                     return modifyPassword(
                           pCustomerAccountId,
                           aCustomerPassword,
45
                           new Properties(),
                * This method is used to modify/reset a customer's account password.
50
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                * </PRE><BR>
                * @param pCustomerAccountId the parameter value
55
                  @param aCustomerPassword the attribute value
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
```

```
* @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND_MODIFY
                 * @see NSIWholesaleAPI#CLASS_PASSWORD
 5
                 * @see NSIWholesaleAPI#COMBO_MODIFY_PASSWORD
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                 * @see NSIWholesaleAPI#ATTR CUSTOMER PASSWORD
                   @see WSPResponse#GENERAL ACCESS DENIED
10
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
                public WSPResponse modifyPassword(
                      String pCustomerAccountId,
-15
                      String aCustomerPassword,
                      Properties optionalAttributes)
                throws NSIWholesaleException {
                      return modifyPassword(
                            pCustomerAccountId,
20
                            aCustomerPassword,
                            optionalAttributes,
               protected WSPResponse modifyPassword(
25
                      String pCustomerAccountId,
                     String aCustomerPassword,
                      Properties optionalAttributes,
                      int count)
               throws NSIWholesaleException {
30
                     String methodName = className + ".modifyPassword(String, String,
                     int) ";
         Properties,
                      if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
35
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
                     try {
40
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
                           // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
45
                           allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
         pCustomerAccountId);
                           allParmsAndAttrs.put(ATTR CUSTOMER PASSWORD,
         aCustomerPassword);
50
                           returnCode = conn.makeRequest(COMBO_MODIFY_PASSWORD,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
55
                     } catch (Exception e) {
                           try {
                                 pool.release(conn);
```

```
catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
 5
                            finally {
                                  return modifyPassword(
                                        pCustomerAccountId,
                                        aCustomerPassword,
10
                                        optionalAttributes,
                                        count + 1);
15
                  This method is used to generate a list of available
                  domain names based on a specified list of keywords.
                  <BR><PRE>
20
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                      Expected Result Property Key(s) Returned:
                            DomainName0:
                            DomainNamel:
25
                            DomainName2:
                            DomainName3:
                            ...etc...
                * </PRE><BR>
                 * @param pKeyWords the parameter value
30
                 * @return the Wholesale Server Protocol Server response

    @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when

         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND GENERATE
                 * @see NSIWholesaleAPI#CLASS_DOMAIN_NAME
35
                 * @see NSIWholesaleAPI#COMBO_GENERATE_DOMAIN NAME
                  @see NSIWholesaleAPI#PARM_KEY_WORDS
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA BEING RETURNED
40
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
               public WSPResponse generateDomainName(
                     String pKeyWords)
               throws NSIWholesaleException {
                     return generateDomainName(
                            pKeyWords,
                            new Properties(),
                            0);
50
                  This method is used to generate a list of available
                  domain names based on a specified list of keywords.
                  <BR><PRE>
55
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
                      Expected Result Property Key(s) Returned:
```

```
DomainName0:
                            DomainNamel:
                            DomainName2:
                            DomainName3:
                            ...etc...
                 * </PRE><BR>
                * @param pKeyWords the parameter value
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
10
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND GENERATE
                * @see NSIWholesaleAPI#CLASS_DOMAIN_NAME
                  @see NSIWholesaleAPI#COMBO_GENERATE_DOMAIN_NAME
15
                  @see NSIWholesaleAPI#PARM_KEY_WORDS
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED NO DATA BEING RETURNED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
20
               public WSPResponse generateDomainName(
                     String pKeyWords,
                     Properties optionalAttributes)
25
               throws NSIWholesaleException {
                     return generateDomainName(
                           pKeyWords,
                           optionalAttributes,
                            0);
30
               protected WSPResponse generateDomainName(
                     String pKeyWords,
                    : Properties optionalAttributes,
                     int count)
35
               throws NSIWholesaleException {
                     String methodName = className + ".generateDomainName(String,
         Properties, int) ";
                     if (count > retry) {
                           throw new NSIWholesaleException(methodName + "Unable to
40
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
45
                     trv {
                           conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
                           // put optional attributes
50
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                           allParmsAndAttrs.put(PARM_KEY_WORDS, pKeyWords);
                           returnCode = conn.makeRequest(COMBO GENERATE DOMAIN NAME,
55 ·
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
```

```
} catch (Exception e) {
                           try {
                                  pool.release(conn);
 5
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
                            finally {
10
                                  return generateDomainName(
                                        pKeyWords,
                                        optionalAttributes,
                                        count + 1);
15
20
                 * Retrieves a list of all domain products owned by customer.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
25
                           DomainName1:
                           DomainName2:
                           DomainName3:
                            ...etc...
                 * </PRE><BR>
30
                  @param pCustomerAccountId the parameter value
                  @param pCustomerPassword the parameter value
                  @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
35
                 * @see NSIWholesaleAPI#COMMAND LOOKUP
                * @see NSIWholesaleAPI#CLASS DOMAIN
                 * @see NSIWholesaleAPI#COMBO_LOOKUP_DOMAIN
                * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
40
                * @see WSPResponse#GENERAL_ACCESS_DENIED
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
45
               public WSPResponse lookupDomain(
                     String pCustomerAccountId,
                     String pCustomerPassword)
50
               throws NSIWholesaleException {
                     return lookupDomain(
                           pCustomerAccountId,
                           pCustomerPassword,
                           new Properties(),
55
                           0);
```

```
* Retrieves a list of all domain products owned by customer.
                  <BR><PRE>
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
 5
                      Expected Result Property Key(s) Returned:
                            DomainName1:
                            DomainName2:
                            DomainName3:
                            ...etc...
10
                 * </PRE><BR>
                 @param pCustomerAccountId the parameter value
                 * @param pCustomerPassword the parameter value
                  @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
15
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND LOOKUP
                * @see NSIWholesaleAPI#CLASS DOMAIN
                * @see NSIWholesaleAPI#COMBO_LOOKUP_DOMAIN
20
                  @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                  @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                  @see WSPResponse#GENERAL_ACCESS DENIED
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO DATA BEING RETURNED
25
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
               public WSPResponse lookupDomain(
30
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return lookupDomain(
35
                           pCustomerAccountId,
                            pCustomerPassword,
                            optionalAttributes,
40
               protected WSPResponse lookupDomain(
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     Properties optionalAttributes,
                     int count)
45
               throws NSIWholesaleException {
                     String methodName = className + ".lookupDomain(String, String,
         Properties, int) ";
                     if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
50
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
55
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
```

```
// put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
         pCustomerAccountId);
                            allParmsAndAttrs.put(PARM_CUSTOMER_PASSWORD,
         pCustomerPassword);
10
                            returnCode = conn.makeRequest(COMBO_LOOKUP_DOMAIN,
         allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
                      } catch (Exception e) {
15
                            try {
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
20
         ResourceException" + re);
                            finally {
                                  return lookupDomain(
                                        pCustomerAccountId,
25
                                        pCustomerPassword,
                                        optionalAttributes,
                                        count + 1);
30
                  Retrieves detail information about a specific domain product
35
                 * registered to a customer. This form of the lookup domain
                  command will also retrieve the status of the domain while
                  it is being processed or after it has failed.
                  <BR><PRE>
                     Expected Major Result Code:
40
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                            ATTR_DOMAIN_NAME
                            ATTR_TECH_CONTACT_ID
                            ATTR_HOST_NAME1
45
                            ATTR_HOST_ADDR1
                           ATTR_HOST_ID1
                           ATTR_HOST_NAME2
                            ATTR HOST ADDR2
                            ATTR HOST ID2
50
                * </PRE><BR>
                * @param pCustomerAccountId the parameter value
                * @param pCustomerPassword the parameter value
                * @param pDomainName the parameter value
                * @return the Wholesale Server Protocol Server response
55
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                  @see NSIWholesaleAPI#COMMAND LOOKUP
```

```
* @see NSIWholesaleAPI#CLASS DOMAIN
                 * @see NSIWholesaleAPI#COMBO_LOOKUP DOMAIN
                  @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                   @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                   @see NSIWholesaleAPI#PARM DOMAIN NAME
                   @see WSPResponse#GENERAL ACCESS DENIED
                  @see WSPResponse#OBJECT_NOT_FOUND
10
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                 * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED TEXT BEING RETURNED
               public WSPResponse lookupDomain(
15
                     String pCustomerAccountId,
                      String pCustomerPassword,
                     String pDomainName)
               throws NSIWholesaleException {
                      return lookupDomain(
20
                           pCustomerAccountId,
                           pCustomerPassword,
                           pDomainName,
                            new Properties(),
25
                  Retrieves detail information about a specific domain product
                  registered to a customer. This form of the lookup domain
                  command will also retrieve the status of the domain while
30
                  it is being processed or after it has failed.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
35
                           ATTR_DOMAIN_NAME
                           ATTR_TECH_CONTACT_ID
                           ATTR_HOST_NAME1
                           ATTR_HOST_ADDR1
                           ATTR_HOST_ID1
40
                           ATTR_HOST_NAME2
                           ATTR HOST ADDR2
                           ATTR HOST ID2
                 * </PRE><BR>
                  @param pCustomerAccountId the parameter value
45
                * @param pCustomerPassword the parameter value
                 * @param pDomainName the parameter value
                  @param optionalAttributes a property list of optional attributes
                  @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
50
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_LOOKUP
                * @see NSIWholesaleAPI#CLASS_DOMAIN
                 * @see NSIWholesaleAPI#COMBO_LOOKUP_DOMAIN
                * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT ID
55
                * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
                  @see NSIWholesaleAPI#PARM_DOMAIN NAME
```

```
* @see WSPResponse#GENERAL ACCESS DENIED
                 * @see WSPResponse#OBJECT NOT FOUND
         WSPResponse#COMMAND_EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
                 * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED TEXT BEING RETURNED.
               public WSPResponse lookupDomain(
                     String pCustomerAccountId,
10
                      String pCustomerPassword,
                     String pDomainName,
                      Properties optionalAttributes)
               throws NSIWholesaleException {
                     return lookupDomain(
15
                          pCustomerAccountId,
                            pCustomerPassword,
                            pDomainName,
                            optionalAttributes,
                            0);
20
               protected WSPResponse lookupDomain(
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     String pDomainName,
25
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
                     String methodName = className + ".lookupDomain(String, String,
         String, Properties, int) ";
30
                     if (count > retry) {
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
35
                     WSPResponse returnCode;
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
40
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                           allParmsAndAttrs.put(PARM_CUSTOMER ACCOUNT ID.
45
         pCustomerAccountId);
                           allParmsAndAttrs.put(PARM_CUSTOMER_PASSWORD,
         pCustomerPassword);
                           allParmsAndAttrs.put(PARM_DOMAIN_NAME, pDomainName);
50
                           returnCode = conn.makeRequest(COMBO_LOOKUP_DOMAIN,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
                     } catch (Exception e) {
55
                           try {
                                 pool.release(conn);
```

```
catch (ResourceException re) {
                                 System.err.println(methodName + "Caught
         ResourceException" + re);
                           finally {
                                  return lookupDomain(
                                        pCustomerAccountId,
                                        pCustomerPassword,
                                        pDomainName,
10
                                        optionalAttributes,
                                        count + 1);
               }
15
                  Retrieves a list of the customer's domain products
                  for which the technical contact id is the technical contact.
20
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           DomainNamel:
25
                           DomainName2:
                           DomainName3:
                            ...etc...
                * </PRE><BR>
                  @param pCustomerAccountId the parameter value
30
                  @param pTechContactId the parameter value
                  @param pTechContactPassword the parameter value
                  @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
35
                * @see NSIWholesaleAPI#COMMAND LOOKUP
                  @see NSIWholesaleAPI#CLASS DOMAIN
                  @see NSIWholesaleAPI#COMBO_LOOKUP_DOMAIN
                  @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                  @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
40
                  @see NSIWholesaleAPI#PARM_TECH_CONTACT_PASSWORD
                  @see WSPResponse#GENERAL ACCESS DENIED
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED NO DATA BEING RETURNED
45
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
               public WSPResponse lookupDomainByTechContact(
                     String pCustomerAccountId,
50
                     String pTechContactId,
                     String pTechContactPassword)
               throws NSIWholesaleException {
                     return lookupDomainByTechContact(
                           pCustomerAccountId,
55
                           pTechContactId,
                           pTechContactPassword,
                           new Properties(),
```

```
0);
                  Retrieves a list of the customer's domain products
                  for which the technical contact id is the technical contact.
                   <BR><PRE>
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                      Expected Result Property Key(s) Returned:
10
                            DomainNamel:
                            DomainName2:
                            DomainName3:
                            ...etc...
                  </PRE><BR>
15
                  @param pCustomerAccountId the parameter value
                 * @param pTechContactId the parameter value
                 * @param pTechContactPassword the parameter value
                * @param optionalAttributes a property list of optional attributes
                 * @return the Wholesale Server Protocol Server response
20
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND LOOKUP
                * @see NSIWholesaleAPI#CLASS DOMAIN
                * @see NSIWholesaleAPI#COMBO_LOOKUP_DOMAIN
25
                 * @see NSIWholesaleAPI#PARM CUSTOMER ACCOUNT ID
                * @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
                  @see NSIWholesaleAPI#PARM_TECH_CONTACT_PASSWORD
                  @see WSPResponse#GENERAL_ACCESS DENIED
30
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED NO DATA BEING RETURNED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
               */
35
               public WSPResponse lookupDomainByTechContact(
                     String pCustomerAccountId,
                     String pTechContactId,
                     String pTechContactPassword,
                     Properties optionalAttributes)
40
               throws NSIWholesaleException {
                     return lookupDomainByTechContact(
                           pCustomerAccountId,
                           pTechContactId,
                           pTechContactPassword,
45
                           optionalAttributes,
               protected WSPResponse lookupDomainByTechContact(
                     String pCustomerAccountId,
50
                     String pTechContactId,
                     String pTechContactPassword,
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
55
                     String methodName = className +
         ".lookupDomainByTechContact(String, String, String, Properties, int) ";
                     if (count > retry) {
```

```
throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
 5
                     WSPResponse returnCode;
                     try {
                           conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
10
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                           allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
15
         pCustomerAccountId);
                           allParmsAndAttrs.put(PARM_TECH_CONTACT_ID, pTechContactId);
                           allParmsAndAttrs.put(PARM TECH CONTACT PASSWORD,
         pTechContactPassword);
20
                           returnCode = conn.makeRequest(COMBO_LOOKUP DOMAIN,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
                     } catch (Exception e) {
25
                           try {
                                 pool.release(conn);
                           catch (ResourceException re) {
                                 System.err.println(methodName + "Caught
30
         ResourceException" + re);
                           finally {
                                 return lookupDomainByTechContact(
                                        pCustomerAccountId,
35
                                        pTechContactId,
                                        pTechContactPassword,
                                        optionalAttributes,
                                        count + 1);
40
45
                  Retrieves details of a specific domain product owned by customer,
                * for which the technical contact id is the technical contact for
                  the specific product.
                  <BR><PRE>
                     Expected Major Result Code:
50
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR DOMAIN_NAME
                           ATTR_TECH_CONTACT_ID
                           ATTR_HOST_NAME1
55
                           ATTR_HOST_ADDR1
                           ATTR_HOST_ID1
                           ATTR_HOST_NAME2
```

ATTR_HOST_ADDR2 ATTR_HOST_ID2

```
</PRE><BR>
                  @param pCustomerAccountId the parameter value
                  @param pTechContactId the parameter value
                  @param pTechContactPassword the parameter value
                  @param pDomainName the parameter value
                  @return the Wholesale Server Protocol Server response
                 @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
10
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND_LOOKUP
                  @see NSIWholesaleAPI#CLASS_DOMAIN
                  @see NSIWholesaleAPI#COMBO_LOOKUP_DOMAIN
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
15
                 * @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
                 * @see NSIWholesaleAPI#PARM_TECH_CONTACT_PASSWORD
                  @see NSIWholesaleAPI#PARM DOMAIN NAME
                 * @see WSPResponse#GENERAL ACCESS DENIED
20
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
                 * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING RETURNED
25
               public WSPResponse lookupDomainByTechContact(
                     String pCustomerAccountId,
                      String pTechContactId,
                     String pTechContactPassword,
                     String pDomainName)
30
               throws NSIWholesaleException {
                     return lookupDomainByTechContact(
                           pCustomerAccountId,
                           pTechContactId,
                           pTechContactPassword,
35
                           pDomainName,
                           new Properties(),
                            0);
40

    Retrieves details of a specific domain product owned by customer,

                  for which the technical contact id is the technical contact for
                  the specific product.
                  <BR><PRE>
                     Expected Major Result Code:
45
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR DOMAIN NAME
                           ATTR_TECH_CONTACT_ID
                           ATTR_HOST_NAME1
                           ATTR_HOST_ADDR1
50
                           ATTR_HOST_ID1
                           ATTR HOST NAME2
                           ATTR HOST ADDR2
                           ATTR_HOST ID2
55
                  </PRE><BR>
                  @param pCustomerAccountId the parameter value
                  @param pTechContactId the parameter value
```

```
    * @param pTechContactPassword the parameter value

                * @param pDomainName the parameter value
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND LOOKUP

    * @see NSIWholesaleAPI#CLASS DOMAIN

                * @see NSIWholesaleAPI#COMBO LOOKUP DOMAIN
10
                * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                * @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
                * @see NSIWholesaleAPI#PARM TECH_CONTACT PASSWORD
                  @see NSIWholesaleAPI#PARM_DOMAIN_NAME
15
                * @see WSPResponse#GENERAL_ACCESS_DENIED
         WSPResponse#COMMAND EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED TEXT BEING RETURNED
20
               public WSPResponse lookupDomainByTechContact(
                     String pCustomerAccountId,
                     String pTechContactId,
                     String pTechContactPassword,
25
                     String pDomainName,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return lookupDomainByTechContact(
                           pCustomerAccountId,
30
                           pTechContactId,
                           pTechContactPassword,
                           pDomainName,
                           optionalAttributes,
35
               protected WSPResponse lookupDomainByTechContact(
                     String pCustomerAccountId,
                     String pTechContactId,
                     String pTechContactPassword,
40
                     String pDomainName,
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
                     String methodName = className +
45
         ".lookupDomainByTechContact(StringX4, Properties, int) ";
                     if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
50
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
                     try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
55
                           Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
```

```
propertiesCat(allParmsAndAttrs, optionalAttributes):
                            allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT ID,
         pCustomerAccountId);
 5
                            allParmsAndAttrs.put(PARM_TECH_CONTACT_ID, pTechContactId):
                            allParmsAndAttrs.put(PARM_TECH_CONTACT_PASSWORD,
         pTechContactPassword);
                            allParmsAndAttrs.put(PARM_DOMAIN_NAME, pDomainName);
10
                            returnCode = conn.makeRequest(COMBO_LOOKUP DOMAIN,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                            return returnCode;
                     } catch (Exception e) { .
15
                            try {
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
20
         ResourceException" + re);
                            finally {
                                  return lookupDomainByTechContact(
                                        pCustomerAccountId,
25.
                                        pTechContactId,
                                        pTechContactPassword,
                                        pDomainName,
                                        optionalAttributes,
                                        count + 1);
30
                            }.
                     }
35
                  Retrieves a list of all domain names associated with
                  DNS Hosting products owned by customer.
                  <BR><PRE>
                     Expected Major Result Code:
40
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                     DomainNamel:
                     DomainName2:
                     DomainName3:
45
                     ...etc...
                  </PRE><BR>
                  @param pCustomerAccountId the parameter value
                  @param pCustomerPassword the parameter value
                  @return the Wholesale Server Protocol Server response
50
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                  @see NSIWholesaleAPI#COMMAND LOOKUP
                  @see NSIWholesaleAPI#CLASS DNS HOSTING
                  @see NSIWholesaleAPI#COMBO_LOOKUP_DNS_HOSTING
55
                  @see NSIWholesaleAPI#PARM_CUSTOMER ACCOUNT ID
                  @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
```

```
* @see WSPResponse#GENERAL_ACCESS_DENIED
                * @see WSPResponse#COMMAND_EXECUTION SUCCEEDED_NO DATA BEING RETURNED
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
 5
               public WSPResponse lookupDnsHosting(
                     String pCustomerAccountId,
                     String pCustomerPassword)
10
               throws NSIWholesaleException {
                     return lookupDnsHosting(
                           pCustomerAccountId,
                           pCustomerPassword,
                           new Properties(),
15
                  Retrieves a list of all domain names associated with
                  DNS Hosting products owned by customer.
20
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                     DomainName1:
25
                     DomainName2:
                     DomainName3:
                      ...etc...
                 * </PRE><BR>
                 * @param pCustomerAccountId the parameter value
30
                 * @param pCustomerPassword the parameter value

    * @param optionalAttributes a property list of optional attributes

                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
35
                * @see NSIWholesaleAPI#COMMAND_LOOKUP
                * @see NSIWholesaleAPI#CLASS_DNS_HOSTING
                * @see NSIWholesaleAPI#COMBO_LOOKUP_DNS_HOSTING
                * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
40
                * @see WSPResponse#GENERAL_ACCESS_DENIED
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED NO DATA BEING RETURNED
                * @see
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
45
               public WSPResponse lookupDnsHosting(
                     String pCustomerAccountId,
                     String pCustomerPassword,
50
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return lookupDnsHosting(
                           pCustomerAccountId,
                           pCustomerPassword,
55
                            optionalAttributes,
```

```
protected WSPResponse lookupDnsHosting(
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     Properties optionalAttributes,
 5
                     int count)
               throws NSIWholesaleException {
                     String methodName = className + ".lookupDnsHosting(String, String,
         Properties, int) ";
                     if (count > retry) {
10
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
15
                     try {
                           conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
20
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                           allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
         pCustomerAccountId);
25
                           allParmsAndAttrs.put(PARM CUSTOMER PASSWORD,
         pCustomerPassword);
                           returnCode = conn.makeRequest(COMBO_LOOKUP DNS HOSTING,
         allParmsAndAttrs);
30
                           pool.checkIn(conn);
                           return returnCode;
                     } catch (Exception e) {
                           try {
                                 pool.release(conn);
35
                           catch (ResourceException re) {
                                 System.err.println(methodName + "Caught
         ResourceException" + re);
40
                           finally {
                                  return lookupDnsHosting(
                                       pCustomerAccountId,
                                       pCustomerPassword,
                                        optionalAttributes,
45
                                        count + 1);
50
                * Retrieves details of a specific
                * DNS Hosting product owned by customer.
                * Used to verify a domain name is part of a DNS Hosting Product
55
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
```

```
Expected Result Property Key(s) Returned:
                           ATTR_DOMAIN_NAME
                  @param pCustomerAccountId the parameter value
 5
                * @param pCustomerPassword the parameter value
                * @param pDomainName the parameter value
                * @return the Wholesale Server Protocol Server response
                @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
10
                * @see NSIWholesaleAPI#COMMAND LOOKUP
                * @see NSIWholesaleAPI#CLASS_DNS_HOSTING
                  @see NSIWholesaleAPI#COMBO_LOOKUP_DNS_HOSTING
                  @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
15
                  @see NSIWholesaleAPI#PARM_DOMAIN_NAME
                  @see WSPResponse#GENERAL ACCESS DENIED
                  @see WSPResponse#OBJECT NOT FOUND
20
         WSPResponse#COMMAND EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING_RETURNED
               */
               public WSPResponse lookupDnsHosting(
                     String pCustomerAccountId,
25
                     String pCustomerPassword,
                     String pDomainName)
               throws NSIWholesaleException {
                     return lookupDnsHosting(
                           pCustomerAccountId,
30
                           pCustomerPassword,
                           pDomainName,
                           new Properties(),
35
                  Retrieves details of a specific
                  DNS Hosting product owned by customer.
                  Used to verify a domain name is part of a DNS Hosting Product
40
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR_DOMAIN_NAME
45
                 * </PRE><BR>
                  @param pCustomerAccountId the parameter value
                 * @param pCustomerPassword the parameter value
                 * @param pDomainName the parameter value

    * @param optionalAttributes a property list of optional attributes

50
                * @return the Wholesale Server Protocol Server response
```

* @see NSIWholesaleAPI#COMMAND_LOOKUP * @see NSIWholesaleAPI#CLASS DNS HOSTING

* @see NSIWholesaleAPI#COMBO_LOOKUP_DNS_HOSTING * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD

unable to complete command

55

* @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when

```
@see NSIWholesaleAPI#PARM DOMAIN NAME
                   @see WSPResponse#GENERAL ACCESS DENIED
                   @see WSPResponse#OBJECT_NOT FOUND
  5
          WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
                   @see WSPResponse#COMMAND_EXECUTION SUCCEEDED TEXT BEING RETURNED
 10
                public WSPResponse lookupDnsHosting(
                      String pCustomerAccountId,
                      String pCustomerPassword, .
                      String pDomainName,
                      Properties optionalAttributes)
 15
                throws NSIWholesaleException {
                      return lookupDnsHosting( -
                            pCustomerAccountId,
                            pCustomerPassword,
                            pDomainName,
- 20
                            optionalAttributes,
                protected WSPResponse lookupDnsHosting(
                      String pCustomerAccountId,
25
                      String pCustomerPassword,
                      String pDomainName,
                      Properties optionalAttributes,
                      int count)
                throws NSIWholesaleException {
 30
                      String methodName = className + ".lookupDnsHosting(String, String,
          String, Properties, int) ";
                      if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
          complete command");
 35
                      NSIWholesaleConnection conn = null;
                      WSPResponse returnCode;
                      try {
 40
                            conn = (NSIWholesaleConnection)pool.checkOut();
                             Properties allParmsAndAttrs = new Properties();
                             // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
 45
                             allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
          pCustomerAccountId);
                             allParmsAndAttrs.put(PARM_CUSTOMER_PASSWORD,
          pCustomerPassword);
 50
                             allParmsAndAttrs.put(PARM_DOMAIN_NAME, pDomainName);
                             returnCode = conn.makeRequest(COMBO LOOKUP DNS HOSTING,
          allParmsAndAttrs);
                             pool.checkIn(conn);
55
                             return returnCode;
                      } catch (Exception e) {
                             try {
```

```
pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
 5
         ResourceException" + re);
                            finally {
                                  return lookupDnsHosting(
                                        pCustomerAccountId,
10
                                        pCustomerPassword,
                                        pDomainName,
                                        optionalAttributes,
                                        count + 1);
15
20
                * Retrieves a list of all individual accounts linked to a wholesaler.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
25
                           CustomerAccountId1:
                           CustomerAccountId2:
                           CustomerAccountId3:
                            ...etc...
                * </PRE><BR>
30
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_LOOKUP
                * @see NSIWholesaleAPI#CLASS_INDIVIDUAL_ACCOUNT
                  @see NSIWholesaleAPI#COMBO_LOOKUP_INDIVIDUAL_ACCOUNT
35
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED NO DATA BEING RETURNED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
40
               public WSPResponse lookupIndividualAccount()
               throws NSIWholesaleException {
                     return lookupIndividualAccount(
45
                           new Properties(),
                  Retrieves a list of all individual accounts linked to a wholesaler.
50
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED PROPERTIES_BEING RETURNED
                     Expected Result Property Key(s) Returned:
                           CustomerAccountId1:
55
                           CustomerAccountId2:
                           CustomerAccountId3:
                            ..etc...
```

```
* </PRE><BR>
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
 5
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND LOOKUP
                * @see NSIWholesaleAPI#CLASS INDIVIDUAL ACCOUNT
                * @see NSIWholesaleAPI#COMBO LOOKUP INDIVIDUAL ACCOUNT
10
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
               */
15
               public WSPResponse lookupIndividualAccount(
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return lookupIndividualAccount(
                           optionalAttributes,
20
               protected WSPResponse lookupIndividualAccount (
                     Properties optionalAttributes,
                     int count)
25
               throws NSIWholesaleException {
                     String methodName = className +
         ".lookupIndividualAccount(Properties, int) ";
                     if (count > retry) {
                           throw new NSIWholesaleException (methodName + "Unable to
30
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
35
                     try {
                           conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
                           // put optional attributes
40
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                           returnCode =
         conn.makeRequest(COMBO LOOKUP INDIVIDUAL ACCOUNT, allParmsAndAttrs);
                           pool.checkIn(conn);
45
                           return returnCode;
                     } catch (Exception e) {
                           try {
                                  pool.release(conn);
50
                           catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
                            finally {
55
                                  return lookupIndividualAccount(
                                        optionalAttributes,
                                        count + 1);
```

```
5
                 * Retrieves details of a specific individual customer account.
                  <BR><PRE>
                      Expected Major Result Code:
10
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                      Expected Result Property Key(s) Returned:
                            ATTR_FIRST_NAME
                            ATTR LAST NAME
                            ATTR PHONE
15
                            ATTR AUTH QUESTION
                            ATTR AUTH ANSWER
                            ATTR FAX
                            ATTR EMAIL
                            ATTR ADDRESS1
20
                            ATTR ADDRESS2
                            ATTR ADDRESS3
                            ATTR ADDRESS4
                            ATTR ADDRESS5
                            ATTR CITY
25
                            ATTR STATE
                            ATTR POSTAL CODE
                            ATTR COUNTRY CODE
                 * </PRE><BR>
                 * @param pCustomerAccountId the parameter value
30
                 * @param pCustomerPassword the parameter value
                 * @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                 * @see NSIWholesaleAPI#COMMAND LOOKUP
35
                 * @see NSIWholesaleAPI#CLASS INDIVIDUAL ACCOUNT
                 * @see NSIWholesaleAPI#COMBO_LOOKUP INDIVIDUAL ACCOUNT
                 * @see NSIWholesaleAPI#PARM CUSTOMER ACCOUNT ID
                 * @see NSIWholesaleAPI#PARM CUSTOMER PASSWORD
40
                 * @see WSPResponse#GENERAL_ACCESS_DENIED
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
45
               public WSPResponse lookupIndividualAccount(
                     String pCustomerAccountId,
                      String pCustomerPassword)
               throws NSIWholesaleException {
                      return lookupIndividualAccount(
50
                            pCustomerAccountId,
                            pCustomerPassword,
                            new Properties(),
                            0);
55
                  Retrieves details of a specific individual customer account.
                  <BR><PRE>
```

```
Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                      Expected Result Property Key(s) Returned:
                            ATTR_FIRST_NAME
 5
                            ATTR_LAST_NAME
                            ATTR PHONE
                            ATTR_AUTH_QUESTION
                            ATTR_AUTH_ANSWER
                            ATTR_FAX
10
                            ATTR_EMAIL
                            ATTR_ADDRESS1
                            ATTR_ADDRESS2
                            ATTR_ADDRESS3
                            ATTR_ADDRESS4
15
                            ATTR_ADDRESS5
                            ATTR_CITY
                            ATTR STATE
                            ATTR POSTAL CODE
                            ATTR COUNTRY CODE
20
                  </PRE><BR>
                  @param pCustomerAccountId the parameter value
                 * @param pCustomerPassword the parameter value
                 * @param optionalAttributes a property list of optional attributes
                 * @return the Wholesale Server Protocol Server response
25
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
        unable to complete command
                * @see NSIWholesaleAPI#COMMAND_LOOKUP
                 * @see NSIWholesaleAPI#CLASS_INDIVIDUAL_ACCOUNT
                * @see NSIWholesaleAPI#COMBO_LOOKUP_INDIVIDUAL_ACCOUNT
30
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                  @see NSIWholesaleAPI#PARM CUSTOMER PASSWORD
                  @see WSPResponse#GENERAL_ACCESS:DENIED
35
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
               public WSPResponse lookupIndividualAccount(
                     String pCustomerAccountId,
40
                     String pCustomerPassword,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return lookupIndividualAccount(
                           pCustomerAccountId,
45
                            pCustomerPassword,
                            optionalAttributes,
                            0);
               protected WSPResponse lookupIndividualAccount(
50
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
55
                     String methodName = className + ".lookupIndividualAccount(String,
         String, Properties, int) ";
                     if (count > retry) {
```

```
throw new NSIWholesaleException (methodName + "Unable to
         complete command");
                      NSIWholesaleConnection conn = null;
 5
                      WSPResponse returnCode;
                      try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
10
                            // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT ID,
15
         pCustomerAccountId);
                            allParmsAndAttrs.put(PARM CUSTOMER PASSWORD.
         pCustomerPassword);
                            returnCode =
20
         conn.makeRequest(COMBO_LOOKUP_INDIVIDUAL_ACCOUNT, allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
                      } catch (Exception e) {
                            try {
25
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
30
                            finally {
                                  return lookupIndividualAccount(
                                        pCustomerAccountId,
                                        pCustomerPassword,
35
                                        optionalAttributes,
                                        count + 1);
               } .
40
                * Retrieves a list of all business customer accounts linked to
45
         wholesaler.
                * <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
50
                           CustomerAccountId1:
                           CustomerAccountId2:
                            CustomerAccountId3:
                             ..etc...
                * </PRE><BR>
55
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
```

```
* @see NSIWholesaleAPI#COMMAND LOOKUP
                 * @see NSIWholesaleAPI#CLASS BUSINESS ACCOUNT
                  @see NSIWholesaleAPI#COMBO_LOOKUP BUSINESS_ACCOUNT
 5
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
10
               public WSPResponse lookupBusinessAccount()
               throws NSIWholesaleException {
                     return lookupBusinessAccount(
                           new Properties(),
15
                * Retrieves a list of all business customer accounts linked to
         wholesaler.
                * <BR><PRE>
20
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           CustomerAccountId1:
                           CustomerAccountId2:
25
                           CustomerAccountId3:
                            ...etc...
                * </PRE><BR>
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
30
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND LOOKUP
                * @see NSIWholesaleAPI#CLASS BUSINESS ACCOUNT
                * @see NSIWholesaleAPI#COMBO_LOOKUP_BUSINESS ACCOUNT
35
                * @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING RETURNED
         WSPResponse#COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
40
               */
               public WSPResponse lookupBusinessAccount(
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return lookupBusinessAccount(
                           optionalAttributes,
               protected WSPResponse lookupBusinessAccount(
                     Properties optionalAttributes,
50
                     int count)
               throws NSIWholesaleException {
                     String methodName = className +
         ".lookupBusinessAccount(Properties, int) ";
                     if (count > retry) {
55
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
```

```
NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
                     try {
5
                           conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
10
                           returnCode = conn.makeRequest(COMBO_LOOKUP_BUSINESS_ACCOUNT,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                           return returnCode;
                     } catch (Exception e) {
15
                           try {
                                  pool.release(conn);
                           catch (ResourceException re) {
20
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
                            finally {
                                  return lookupBusinessAccount(
25
                                        optionalAttributes,
                                        count + 1);
30
                * Retrieves details of a specific business customer account.
                * <BR><PRE>
35
                     Expected Major Result Code:
         COMMAND EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR_COMPANY_NAME
                            ATTR_COMPANY_TYPE
40
                            ATTR_EMAIL
                           ATTR PHONE
                            ATTR_FAX
                            ATTR ADDRESS1
                            ATTR ADDRESS2
45
                            ATTR_ADDRESS3
                            ATTR_ADDRESS4
                            ATTR_ADDRESS5
                            ATTR_CITY
                            ATTR_STATE
50
                            ATTR_POSTAL_CODE
                            ATTR_COUNTRY_CODE
                            ATTR_LEGAL_CONTACT_FIRST_NAME
                            ATTR_LEGAL_CONTACT_LAST_NAME
                            ATTR_LEGAL_CONTACT_PHONE
55
                            ATTR_LEGAL_CONTACT_FAX
                            ATTR LEGAL CONTACT EMAIL
                            ATTR_LEGAL_CONTACT_CITY
```

```
ATTR_LEGAL_CONTACT_STATE
                            ATTR_LEGAL_CONTACT_POSTAL_CODE
                            ATTR_LEGAL_CONTACT_COUNTRY_CODE
                            ATTR_LEGAL_CONTACT_ADDRESS1
 5
                            ATTR_LEGAL_CONTACT_ADDRESS2
                            ATTR_LEGAL_CONTACT_ADDRESS3
                            ATTR LEGAL CONTACT ADDRESS4
                            ATTR LEGAL CONTACT ADDRESS5
                * </PRE><BR>
10
                * @param pCustomerAccountId the parameter value
                * @param pCustomerPassword the parameter value
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
15
                * @see NSIWholesaleAPI#COMMAND LOOKUP
                * @see NSIWholesaleAPI#CLASS BUSINESS ACCOUNT
                * @see NSIWholesaleAPI#COMBO_LOOKUP_BUSINESS ACCOUNT
                * @see NSIWholesaleAPI#PARM CUSTOMER ACCOUNT ID
                * @see NSIWholesaleAPI#PARM_CUSTOMER PASSWORD
20
                * @see WSPResponse#GENERAL ACCESS DENIED
         WSPResponse#COMMAND_EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
25
               public WSPResponse lookupBusinessAccount(
                     String pCustomerAccountId,
                     String pCustomerPassword)
               throws NSIWholesaleException {
30
                     return lookupBusinessAccount (
                           pCustomerAccountId,
                           pCustomerPassword,
                           new Properties(),
35
                  Retrieves details of a specific business customer account.
                  <BR><PRE>
                     Expected Major Result Code:
40
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
                     Expected Result Property Key(s) Returned:
                           ATTR_COMPANY_NAME
                           ATTR_COMPANY_TYPE
                           ATTR_EMAIL
45
                           ATTR_PHONE
                           ATTR_FAX
                           ATTR_ADDRESS1
                           ATTR_ADDRESS2
                           ATTR_ADDRESS3
50
                           ATTR_ADDRESS4
                           ATTR_ADDRESS5
                           ATTR_CITY
                           ATTR_STATE
                           ATTR_POSTAL_CODE
55
                           ATTR_COUNTRY_CODE
                           ATTR_LEGAL CONTACT FIRST NAME
                           ATTR_LEGAL CONTACT_LAST_NAME
```

```
ATTR_LEGAL_CONTACT_PHONE
                           ATTR_LEGAL_CONTACT_FAX
                            ATTR_LEGAL_CONTACT_EMAIL
                            ATTR_LEGAL_CONTACT_CITY
                            ATTR_LEGAL_CONTACT_STATE
                            ATTR_LEGAL_CONTACT_POSTAL_CODE
                            ATTR_LEGAL_CONTACT_COUNTRY_CODE
                            ATTR_LEGAL_CONTACT_ADDRESS1
                            ATTR_LEGAL_CONTACT_ADDRESS2
10
                            ATTR_LEGAL_CONTACT_ADDRESS3
                            ATTR_LEGAL_CONTACT_ADDRESS4
                            ATTR_LEGAL CONTACT ADDRESS5
                 * </PRE><BR>
                 * @param pCustomerAccountId the parameter value
15
                 * @param pCustomerPassword the parameter value

    * @param optionalAttributes a property list of optional attributes

                 * @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
20
                 * @see NSIWholesaleAPI#COMMAND_LOOKUP
                 * @see NSIWholesaleAPI#CLASS_BUSINESS ACCOUNT
                 * @see NSIWholesaleAPI#COMBO LOOKUP BUSINESS ACCOUNT
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_ACCOUNT_ID
                 * @see NSIWholesaleAPI#PARM_CUSTOMER_PASSWORD
25
                * @see_WSPResponse#GENERAL_ACCESS_DENIED
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES BEING RETURNED
30
               public WSPResponse lookupBusinessAccount(
                     String pCustomerAccountId,
                     String pCustomerPassword,
                     Properties optionalAttributes)
35
               throws NSIWholesaleException {
                     return lookupBusinessAccount(
                           pCustomerAccountId,
                           pCustomerPassword,
                           optionalAttributes,
40
               protected WSPResponse lookupBusinessAccount(
                     String pCustomerAccountId,
                     String pCustomerPassword,
45
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
                     String methodName = className + ".lookupBusinessAccount(String,
         String, Properties, int) ";
50
                     if (count > retry) {
                           throw new NSIWholesaleException(methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
55
                     WSPResponse returnCode;
                     try {
```

```
conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
 5
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_CUSTOMER_ACCOUNT_ID,
         pCustomerAccountId);
                            allParmsAndAttrs.put(PARM CUSTOMER PASSWORD,
10
         pCustomerPassword);
                            returnCode = conn.makeRequest(COMBO_LOOKUP_BUSINESS ACCOUNT,
         allParmsAndAttrs);
                            pool.checkIn(conn);
15
                            return returnCode;
                      } catch (Exception e) {
                            try {
                                  pool.release(conn);
20
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
                            finally {
25
                                  return lookupBusinessAccount(
                                        pCustomerAccountId,
                                        pCustomerPassword,
                                        optionalAttributes,
                                        count + 1);
30
35
                 * Retrieves details of a specific technical contact.
                  <BR><PRE>
                      Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED
40
                      Expected Result Property Key(s) Returned:
                            ATTR ORGANIZATION
                            ATTR PHONE
                            ATTR_FAX
                            ATTR_EMAIL
45
                            ATTR_ADDRESS1
                            ATTR_CITY
                            ATTR_STATE
                            ATTR_POSTAL_CODE
                            ATTR_COUNTRY CODE
50
                 * </PRE><BR>

    * @param pTechContactId the parameter value.

                 * @return the Wholesale Server Protocol Server response
                 * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
55
                 * @see NSIWholesaleAPI#COMMAND_LOOKUP
                 * @see NSIWholesaleAPI#CLASS_TECHNICAL CONTACT
                  @see NSIWholesaleAPI#COMBO_LOOKUP_TECHNICAL_CONTACT
```

```
* @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
                * @see
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
 5
               */
               public WSPResponse lookupTechnicalContact(
                     String pTechContactId)
               throws NSIWholesaleException {
10
                     return lookupTechnicalContact(
                           pTechContactId,
                           new Properties(),
                           0);
15
                  Retrieves details of a specific technical contact.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND EXECUTION SUCCEEDED PROPERTIES BEING RETURNED
20
                     Expected Result Property Key(s) Returned:
                           ATTR ORGANIZATION
                           ATTR PHONE
                           ATTR_FAX
                           ATTR EMAIL
25
                           ATTR_ADDRESS1
                           ATTR_CITY
                           ATTR_STATE
                           ATTR POSTAL CODE
                           ATTR COUNTRY CODE
30
                * </PRE><BR>
                * @param pTechContactId the parameter value
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
35
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_LOOKUP
                * @see NSIWholesaleAPI#CLASS_TECHNICAL_CONTACT
                * @see NSIWholesaleAPI#COMBO_LOOKUP_TECHNICAL_CONTACT
                * @see NSIWholesaleAPI#PARM_TECH_CONTACT_ID
40
         WSPResponse#COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING RETURNED
45
               public WSPResponse lookupTechnicalContact(
                     String pTechContactId,
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return lookupTechnicalContact(
50
                           pTechContactId,
                           optionalAttributes,
                           0);
               protected WSPResponse lookupTechnicalContact(
55
                     String pTechContactId,
                     Properties optionalAttributes,
                     int count)
```

```
throws NSIWholesaleException {
                     String methodName = className + ".lookupTechnicalContact(String,
         Properties, int) ";
                      if (count > retry) {
5
                            throw new NSIWholesaleException (methodName + "Unable to
         complete command");
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
10
                      try {
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
15
                            // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
                            allParmsAndAttrs.put(PARM_TECH_CONTACT ID, pTechContactId);
20
                           returnCode =
         conn.makeRequest(COMBO_LOOKUP_TECHNICAL_CONTACT, allParmsAndAttrs);
                            pool.checkIn(conn);
                            return returnCode;
                      } catch (Exception e) {
25
                            try {
                                  pool.release(conn);
                            catch (ResourceException re) {
                                  System.err.println(methodName + "Caught
30
         ResourceException" + re);
                            finally {
                                  return lookupTechnicalContact(
                                        pTechContactId,
35
                                        optionalAttributes,
                                        count + 1);
40
                 * This method returns basic information about the supported
                  protocol commands and classes.
45
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING_RETURNED
                     Expected Text Returned:
                           ... The Help Text...
50
                     Expected Result Property Key(s) Returned:
                           text1:
                            text2:
                            text3:
55
                  </PRE><BR>
                  @return the Wholesale Server Protocol Server response
```

```
* @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see WSPResponse#getProperties
                * @see NSIWholesaleAPI#COMMAND HELP .
 5
                  @see WSPResponse#COMMAND EXECUTION SUCCEEDED TEXT BEING RETURNED
               public WSPResponse help()
               throws NSIWholesaleException {
10
                     return help(
                           new Properties(),
                           0);
15
                  This method returns basic information about the supported
                  protocol commands and classes.
                  <BR><PRE>
                     Expected Major Result Code:
         COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING_RETURNED
20
                     Expected Text Returned:
                            ... The Help Text...
                     Expected Result Property Key(s) Returned:
                           text1:
25
                            text2:
                            text3:
                             . .etc...
                * </PRE><BR>
                * @param optionalAttributes a property list of optional attributes
30
                 * @return the Wholesale Server Protocol Server response
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see WSPResponse#getProperties
                 @see NSIWholesaleAPI#COMMAND HELP
35
                  @see WSPResponse#COMMAND_EXECUTION_SUCCEEDED TEXT BEING RETURNED
               public WSPResponse help(
40
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return help(
                           optionalAttributes,
                           0);
45
               protected WSPResponse help(
                     Properties optionalAttributes,
                     int count)
               throws NSIWholesaleException {
50
                     String methodName = className + ".help(Properties, int) ";
                     if (count > retry) {
                            throw new NSIWholesaleException(methodName + "Unable to
         complete command");
55
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
```

```
try {
                           conn = (NSIWholesaleConnection)pool.checkOut();
                           Properties allParmsAndAttrs = new Properties();
 5
                           // put optional attributes
                           propertiesCat(allParmsAndAttrs, optionalAttributes);
                           returnCode = conn.makeRequest(COMMAND_HELP,
         allParmsAndAttrs);
10
                           pool.checkIn(conn);
                           return returnCode;
                     } catch (Exception e) {
                           try {
                                 pool.release(conn);
15
                           catch (ResourceException re) {
                                 System.err.println(methodName + "Caught
         ResourceException" + re);
20
                           finally {
                                  return help(
                                       optionalAttributes,
                                        count + 1);
25
                 * This method terminates the wholesaler's access to session commands.
30
                * <BR><PRE>
                     Expected Major Result Code: COMMAND_SUCCEEDED_CLOSING_CONNECTION
                * </PRE><BR>
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
35
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_QUIT
                  @see WSPResponse#COMMAND_SUCCEEDED_CLOSING_CONNECTION
40
               public WSPResponse quit()
               throws NSIWholesaleException {
                     return quit (
45
                           new Properties(),
                 * This method terminates the wholesaler's access to session commands.
50
                     Expected Major Result Code: COMMAND_SUCCEEDED_CLOSING_CONNECTION
                * </PRE><BR>
                * @param optionalAttributes a property list of optional attributes
                * @return the Wholesale Server Protocol Server response
55
                * @exception nsi.wholesale.toolkit.javaapi.NSIWholesaleException when
         unable to complete command
                * @see NSIWholesaleAPI#COMMAND_QUIT
```

```
* @see WSPResponse#COMMAND_SUCCEEDED_CLOSING_CONNECTION
5
               public WSPResponse quit(
                     Properties optionalAttributes)
               throws NSIWholesaleException {
                     return quit(
                           optionalAttributes,
10
               protected WSPResponse quit (
                     Properties optionalAttributes,
                     int count)
15
               throws NSIWholesaleException {
                     String methodName = className + ".quit(Properties, int) ";
                     if (count > retry) {
                            throw new NSIWholesaleException (methodName + "Unable to
         complete command");
20
                     NSIWholesaleConnection conn = null;
                     WSPResponse returnCode;
                     try {
25
                            conn = (NSIWholesaleConnection)pool.checkOut();
                            Properties allParmsAndAttrs = new Properties();
                            // put optional attributes
                            propertiesCat(allParmsAndAttrs, optionalAttributes);
30
                            returnCode = conn.makeRequest(COMMAND QUIT,
         allParmsAndAttrs);
                           pool.checkIn(conn);
                            return returnCode;
35
                      } catch (Exception e) {
                            try {
                                  pool.release(conn);
                            catch (ResourceException re) {
40
                                  System.err.println(methodName + "Caught
         ResourceException" + re);
                            finally {
                                  return quit(
45
                                        optionalAttributes,
                                        count + 1);
50
         //#--END API---
                  This method shutsdown the Wholesaler Services Protocol API.
55
                  @return void
```

```
public void shutdown() {
                     System.out.println("NSIWholesaleAPI.shutdown: " +
                           "Calling pool.shutdown()...");
                     //pool.shutdown();
 5
                     try {
                           //pool.close();
                           pool.close(60000, 60000);
                     catch (ResourceException re) {
10
                           System.err.println("Exception Caught: " + re);
                     System.out.println("NSIWholesaleAPI.shutdown: " +
                           "pool.shutdown() returned!");
15
         // Support Functions
20
                * This method parses the string argument as a signed decimal integer
                * @param valueString the string to be parsed as an int
                * @return an int representing the valueString
                * @see java.lang.Integer#parseInt
25
               protected static int parseInt(String valueString) {
                     try {
                           return Integer.parseInt(valueString);
                     } catch (NumberFormatException nfe) {
30
                           return 0;
35
                * This method concatinates the source property list onto the end of the
                * target propery list. Filtering is done to remove properties
         associated with
                * credit card charges.
                * @param target the target (destination) property list
40
                * @param source the source property list
                * @return void
                * @see java.util.Properties
45
               protected static void propertiesCat(Properties target, Properties
         source) {
                     String methodName = className + ".propertiesCat(Properties,
         Properties) ";
50
                     if ((target == null) | (source == null)) {
                           return;
                     // concatinate source properties onto target properties
55
                     if (source.isEmpty() == false) {
                           try {
                                 String key;
```

```
String value;
                                  Enumeration e = source.propertyNames();
                                 while (e.hasMoreElements()) {
                                        key = (String)e.nextElement();
                                        value = source.getProperty(key);
                                           target.put(key, value);
                           catch (NoSuchElementException nsee) {
10
                                 System.err.println(methodName +
                                        "Invalid Properties");
                                 nsee.printStackTrace();
15
                     return;
                * This method concatinates the source property list onto the end of the
20
                * target propery list.
                * @param protocol client (your) protocol
                * @return true if your protocol matches wholesale services protocol,
                 * otherwise false
                * @see NSIWholesaleAPI#ATTR PROTOCOL
25
                  @see NSIWholesaleAPI#Describe
               */
               protected boolean verifyConnectionProtocol(String protocol)
               throws NSIWholesaleException {
30
                     String methodName = className + ".verifyConnectionProtocol(String)
                     WSPResponse wspResponse = describe(ATTR PROTOCOL);
                     if (wspResponse == null) {
                           System.err.println(methodName + "Unable to verify connection
35
         protocol " + protocol);
                           return false;
                     if (wspResponse.getMajorResultCode() ==
         WSPResponse.COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED) {
40
                           String wspProtocol = wspResponse.getProperty(ATTR PROTOCOL);
                           if (wspProtocol == null) {
                                 System.err.println(methodName + "Unable to verify
         connection protocol " + protocol);
                                 return false;
45
                           }
                           if (protocol.equals(wspProtocol)) {
                                 System.out.println(methodName + "Successfully verified
         connection protocol " + protocol);
50
                                 return true;
                           else
                                 System.err.println(methodName + "Failed to verify
         connection protocol: " +
55
                                        "Your Protocol = <" + protocol + "> while
         Wholesale Services Protocol = <" + wspProtocol + ">");
                                 return false;
```

```
System.err.println(methodName + "Unable to verify connection
 5
        protocol " + protocol);
                        return false;
10
        // End of file NSIWholesaleAPI.java
        // ----- Copyright (c) 2000 Network Solutions, Inc -----
15
             The class definition for WSPResponse is as follows:
        //----
        // Package
20
        //-----
        package nsi.wholesale.toolkit.javaapi;
        //----
        // Imports...
25
        //-----
        import java.util.NoSuchElementException;
        import java.util.StringTokenizer;
        import java.util.Hashtable;
        import java.util.Vector;
30
        import java.util.Enumeration;
        import java.util.Properties;
        import java.text.*;
        / * *
35
         * This class represents the various components of a
         * Wholesale Services Protocol (WSP) Response.
         * A WSP response will be returned for each request that is issued
         * throught the protocol. A response will describe, in as much detail
40
         * as possible, the outcome of the issued request, and will optionally
         * include any additional information that was generated by the request.
         * A result consists of a 'result code' followed by a descriptive
         * 'result message'. A 'result code' consists of a major result code
         * followed by a period ('.'), followed by a minor result code.
45
         * The three-digit major result code provides a general indication of
         * the success or failure of an issued request.
         * In most cases, one or more result properties are returned. A result
          property consists of a property key followed by a colon (':'),
         * followed by a property value.
50
         * In other cases, plain text is returned (e.g. the information returned
         * from the Help command). Both of these cases are indicated by specific
          result codes.
                        David A. Moston
          @author
55
          @see
                             NSIWholesaleAPI
```

```
- 27 July 2000
          @since
          @version
         * $Log$
         *<BR>---
                     -----
        public class WSPResponse {
10
        //-----
        // Beginning of Required/Standard Fields
             /** Serial Version */
15
             static long serialVersion = 1L;
             /** Release Version */
             static double version = 1.0D;
20
             /** SCCS control ID */
             static final String sccsID = "@(#) wholesale-sdk_d1.12.1.3 08/04/00
        10:27:15 WSPResponse.java NSI";
             /** JDK Version */
25
             static String jdkVersion = "1.1.7";
             // Static Accessor Method(s)...
             /** Static accessor method to get serial version */
             static public long getSerialVersion() { return serialVersion; }
30
             /** Static accessor method to get release version */
             static public double getVersion() { return version; }
             /** Static accessor method to get JDK version */
35
             static public String getJdkVersion() { return jdkVersion; }
        // End of Required/Standard Fields
        40
        //-----
        // class (static) variable(s) ...
             /** The name of this class */
             private static final String className = "WSPResponse";
45
             /** Ease-of-use constant for Major Result Code: Minimum.
             (Note: this is NOT a valid/supported major result code)
             All valid/supported major result codes will be
             greater than the minimum and less than the maximum, respectively */
50
             public static final int MAJOR_RESULT_CODE_MIN = 99;
             /** Ease-of-use constant for Major Result Code[General Information]:
        Minimum.
             (Note: this is NOT a valid/supported major result code) */
55
             public static final int MAJOR_RESULT_CODE_GENERAL INFORMATION MIN = 99;
             /** Ease-of-use constant for Major Result Code[General Information]:
        General information */
```

```
public static final int GENERAL INFORMATION = 100;
               /** Ease-of-use constant for Major Result Code [General Information]:
         Maximum.
               (Note: this is NOT a valid/supported major result code) */
 5
               public static final int MAJOR_RESULT_CODE_GENERAL_INFORMATION MAX = 199:
               /** Ease-of-use constant for Major Result Code[Success]: Minimum.
               (Note: this is NOT a valid/supported major result code) */
               public static final int MAJOR_RESULT_CODE_SUCCESS_MIN = 199;
               /** Ease-of-use constant for Major Result Code[Success]: Authentication
10
         successful */
               public static final int AUTHENTICATION SUCCESSFUL = 210;
               /** Ease-of-use constant for Major Result Code(Success): Session created
15
               public static final int SESSION_CREATED = 220;
               /** Ease-of-use constant for Major Result Code [Success]: Command
         succeeded, closing connection */
               public static final int COMMAND SUCCEEDED CLOSING CONNECTION = 221;
               /** Ease-of-use constant for Major Result Code (Success): Command
20
         accepted, now executing */
               public static final int COMMAND ACCEPTED NOW EXECUTING = 230;
               /** Ease-of-use constant for Major Result Code [Success]: Command not
         available */
               public static final int COMMAND NOT AVAILABLE = 231;
25
               /** Ease-of-use constant for Major Result Code [Success]: Command
         execution succeeded, no data being returned; Ok */
               public static final int
         COMMAND_EXECUTION_SUCCEEDED_NO_DATA_BEING_RETURNED = 240;
               /** Ease-of-use constant for Major Result Code[Success]: Command
30
         execution succeeded, properties being returned */
               public static final int
         COMMAND_EXECUTION_SUCCEEDED_PROPERTIES_BEING_RETURNED = 241;
               /** Ease-of-use constant for Major Result Code[Success]: Command
         execution succeeded, text being returned */
35
               public static final int COMMAND_EXECUTION SUCCEEDED TEXT BEING RETURNED
         = 242;
               /** Ease-of-use constant for Major Result Code[Success]: Maximum.
               (Note: this is NOT a valid/supported major result code) */
               public static final int MAJOR_RESULT_CODE_SUCCESS_MAX = 299;
40
               /** Ease-of-use constant for Major Result Code(Failure): Minimum.
               (Note: this is NOT a valid/supported major result code) */
               public static final int MAJOR_RESULT_CODE_FAILURE_MIN = 299;
               /** Ease-of-use constant for Major Result Code[Failure]: Authentication
45
               public static final int AUTHENTICATION FAILED = 310;
               /** Ease-of-use constant for Major Result Code [Failure]: Too many
         connections */
               public static final int TOO MANY_CONNECTIONS = 320;
50
               /** Ease-of-use constant for Major Result Code[Failure]: Too many
         connections from current wholesaler */
               public static final int TOO MANY CONNECTIONS FROM CURRENT WHOLESALER =
         321;
               /** Ease-of-use constant for Major Result Code[Failure]: Wholesaler
55
         account has been suspened */
               public static final int WHOLESALER_ACCOUNT_HAS_BEEN SUSPENDED = 322;
```

```
/** Ease-of-use constant for Major Result Code[Failure]: Session timed
         out */
               public static final int SESSION TIMED OUT = 323;
               /** Ease-of-use constant for Major Result Code[Failure]: Server closing
 5
         connection - Command timed out */
               public static final int SERVER_CLOSING_CONNECTION = 324;
               /** Ease-of-use constant for Major Result Code[Failure]: Invalid command
               public static final int INVALID_COMMAND = 330;
               /** Ease-of-use constant for Major Result Code[Failure]: Invalid class
10
               public static final int INVALID CLASS = 331;
               /** Ease-of-use constant for Major Result Code[Failure]: Formatting
         error */
15
               public static final int FORMATTING_ERROR = 332;
               /** Ease-of-use constant for Major Result Code[Failure]: Missing
         required parameter */
               public static final int MISSING_REQUIRED_PARAMETER = 333;
               /** Ease-of-use constant for Major Result Code[Failure]: Invalid
20
         attribute */
               public static final int INVALID_ATTRIBUTE = 334;
               /** Ease-of-use constant for Major Result Code[Failure]: Invalid value
               public static final int INVALID_VALUE = 335;
               /** Ease-of-use constant for Major Result Code[Failure]: Missing
25
         required attribute */
               public static final int MISSING_REQUIRED ATTRIBUTE = 336;
               /** Ease-of-use constant for Major Result Code [Failure] : Missing
         required value */
30
               public static final int MISSING_REQUIRED VALUE = 337;
               /** Ease-of-use constant for Major Result Code[Failure]: Missing
         parameter */
               public static final int INVALID_PARAMETER = 338;
               /** Ease-of-use constant for Major Result Code[Failure]: Command failed,
35
         unknown error - Command failed, internal error */
               public static final int COMMAND_FAILED_UNKNOWN_ERROR = 340;
               /** Ease-of-use constant for Major Result Code[Failure]: Object not
         found */
               public static final int OBJECT NOT FOUND = 341;
               /** Ease-of-use constant for Major Result Code[Failure]: Command access
40
         denied */
               public static final int COMMAND_ACCESS_DENIED = 342;
               /** Ease-of-use constant for Major Result Code[Failure]: General access
         denied - Access to request denied */
45
               public static final int GENERAL_ACCESS_DENIED = 343;
               /** Ease-of-use constant for Major Result Code[Failure]: Maximum.
               (Note: this is NOT a valid/supported major result code) */
               public static final int MAJOR_RESULT_CODE_FAILURE_MAX = 399;
50
               /** Ease-of-use constant for Major Result Code: Maximum.
               (Note: this is NOT a valid/supported major result code)
               All valid/supported major result codes will be
               greater than the minimum and less than the maximum, respectively */
               public static final int MAJOR_RESULT CODE MAX = 400;
55
```

```
// class (static) method(s) ...
 5
         // static initializer block ...
         // instance Variable(s) ...
10
               * WSP response result code (consisting of a major result code,
               * followed by a period ('.'), followed by a minor result code).
               private String resultCode = null;
15
               * WSP response major result code
               private int majorResultCode = 0;
20
               * WSP response minor result code
               private int minorResultCode = 0;
25
               * The original WSP text response string used to instantiate object.
               * The raw WSP response consists of one or more <CRLF> delimited lines,
30
               * terminated by a line containing only a period ('.'), followed by
         <CRLF>.
               private String rawResponse = null;
35
               * The result message extracted from the original WSP text response.
               private String resultMessage = null;
40
               The WSP response attributes extracted from the original WSP
               text response.
               private Hashtable attributes = null;
45
         // Constructors
50

    Parses a WSP text response and extracts and stores the

                 various components.
                * @param data the raw WSP response text
```

```
@exception InvalidResponseFormatException if <code>data</code> is
                                                             not a properly formatted
                                                             WSP response.
 5
               public WSPResponse (String data)
                      throws InvalidArgumentException, InvalidResponseFormatException {
                      if (data == null) {
10
                            throw new InvalidArgumentException("null argument: data");
                     parseRawResponse(data);
                     setRawResponse(data);
15
                 Create a new WSPResponse based on value inputs.
20
                 @param majorCode the major code for the WSPResponse.
                 @param minorCode the minor code for the WSPResponse.
                 Oparam message the text string associated with the message.
                 Oparam assocProps the properties associated with this message.
25
                 @exception InvalidArgumentException if majorCode or minorCode is or
                                                       not in the appropriate range.
               public WSPResponse (int majorCode, int minorCode,
30
                                   String message, Properties assocProps)
                     throws InvalidArgumentException {
                     if ((majorCode == null) || (minorCode == null) ||
                           (majorCode < MAJOR_RESULT_CODE_MIN ) || (majorCode >
35
         MAJOR_RESULT_CODE_MAX) ||
                           (minorCode < 0 ) | (minorCode > 999)) {
                           throw new InvalidArgumentException("null argument: data");
                     majorResultCode = majorCode;
40
                     minorResultCode = minorCode;
                     resultMessage = new String(message);
                     if (assocProps != null) {
                           Enumeration enum = assocProps.propertyNames();
                           while (enum.hasMoreElements()) {
45
                                 String prop_key = (String) enum.nextElement();
                                 String value = prop.getProperty(prop_key);
                                 addAttribute(prop_key, value);
50
                     DecimalFormat myFmt = new DecimalFormat();
                     myFmt.setMinimumIntegerDigits(3);
                     myFmt.setMaximumIntegerDigits(3);
                     myFmt.setMaximumFractionDigits(3);
                     myFmt.setMinimumFractionDigits(3);
55
                     double x = majorCode + minorCode/1000.0;
                     resultCode = myFmt.format(x);
```

* @exception InvalidArgumentException if <code>data</code> is null.

}.

```
// Accessors and Mutators
                * Returns the original WSP text response string used to instantiate
                * object.
10
                * @return the original WSP text response.
               public String getRawResponse () {
                     return rawResponse;
15
                * Returns the result message extracted from the original WSP
                * text response.
20
                * @return the WSP response result message.
               public String getResultMessage () {
                     return resultMessage;
25
                * Returns any attributes, if applicable, extracted from the original
30
                * WSP text response.
                * @return response attributes if any exist, null otherwise.
               Hashtable getAttributes () {
35
                     return attributes;
                * returns the result property value corresponding to the specified
40
                 result property key, if found, extracted from the original
                  WSP text response.
                * @param resultPropertyKey a result property key
                * @return the corresponding result property value, otherwise null
45
               public String getProperty (String resultPropertyKey) {
                     String resultPropertyValue = null;
                     Hashtable attributes = getAttributes();
50
                     if (attributes == null) {
                           return resultPropertyValue;
                     Vector vector = (Vector) attributes.get(resultPropertyKey);
55
                     if (vector == null) {
                           return resultPropertyValue;
```

```
for (int i = 0; i < vector.size(); i++) {
                           resultPropertyValue = (String)vector.elementAt(i);
 5
                     return resultPropertyValue;
10 -
               /**
                 * Returns a property list containing all result property
         specifications,
                * if applicable, extracted from the original WSP text response.
                * Note: when the major result code =
15
         COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING_RETURNED
                * text is being returned in the response, as opposed to result property
         specifications.
                * Since there are no defined result property keys for returned text, a
         dummy
20
                 * result property key is generated for each line of text.
                 * That dummy result property key will look like 'text#', where #
                * is a number from 1 to N (N being the number of lines of text
         returned).
                * For example, the first dummy result property key will be 'text1'.
25
                 * For example, the tenth dummy result property key will be 'text10'.
                 * @return response attributes if any exist, null otherwise.
                 * @see WSPResponse#getText
30
               public Properties getProperties () {
                     Properties props = new Properties();
                     Hashtable attributes = getAttributes();
35
                     if (attributes == null) {
                           return null;
40
                     Enumeration enum = attributes.keys();
                     int lineNumber = 0;
                     while (enum.hasMoreElements()) {
                           lineNumber++;
45
                           String key = null;
                           Vector vector = null; ...
                           key = (String) enum.nextElement();
                           //if Command execution succeeded; text being returned
50
                           if (getMajorResultCode() ==
         COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING_RETURNED) {
                                 key = "text" + lineNumber;
                                                                 // Create a "dummy" key
         for this line of text
55
                           vector = (Vector) attributes.get(key);
                           for (int i=0; i < vector.size(); i++)</pre>
```

```
props.put(key, (String)vector.elementAt(i));
 5
                     return props;
                * Returns a property list containing all result property
10
         specifications,
                * if applicable, extracted from the original WSP text response.
                * Note: when the major result code =
         COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING_RETURNED
                * text is being returned in the response, as opposed to result property
15
         specifications.
                * Since there are no defined result property keys for returned text, a
         dummy
                * result property key is generated for each line of text.
                * That dummy result property key will look like 'text#', where #
20
                * is a number from 1 to N (N being the number of lines of text
         returned).
                * For example, the first dummy result property key will be 'text1'.
                * For example, the tenth dummy result property key will be 'text10'.
25
                * @param wspResponse the WSP response
                * @return response attributes if any exist, null otherwise.
                * @see WSPResponse#getText
               public static Properties getProperties (WSPResponse wspResponse) {
30
                     return wspResponse.getProperties();
                * returns a vector containing lines of text returned in the WSP
35
         response.
                * Note: when the major result code is
         COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING RETURNED,
                text is being returned in the response, as opposed to result property
         specifications.
40
                * There are no result property keys defined for text.
                * This method returns a vector of Strings. Each element (String) in
         the vector is a line of text.
                * @param wspResponse the WSP response
45
                * @return a vector containing lines of text returned, otherwise null
                * @see WSPResponse#getProperties
               public Vector getText () {
50
                     Vector text = new Vector();
                     //if not: Command execution succeeded; text being returned
                     if (getMajorResultCode() !=
         COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING_RETURNED) {
55
                           return null;
```

```
Hashtable attributes = getAttributes();
                     if (attributes == null) {
                           return null;
 5
                     Enumeration enum = attributes.keys();
                     int lineNumber = 0;
10
                     while (enum.hasMoreElements()) {
                           lineNumber++;
                           String key = null;
                           Vector vector = null;
15
                           key = (String) enum.nextElement();
                           //Command execution succeeded; text being returned
                           key = "text" + lineNumber;
                                                         // Create a "dummy" key for
         this line of text
                           vector = (Vector) attributes.get(key);
20
                           for (int i=0; i < vector.size(); i++) {</pre>
                                text.addElement((String)vector.elementAt(i));
25
                     return text;
30
                * sets the raw response text
                * @param aRawResponse the raw WSP response text
                * @return void
35
               private void setRawResponse (String aRawResponse) {
                     rawResponse = aRawResponse;
40
                * sets the response result code
                * @param inResultCode the WSP response result code
45
                * @return void
               private void setResultCode (String inResultCode) {
                     resultCode = inResultCode;
50
                * returns the WSP response result code and result message
                * @return the WSP response result code and result message
55
               public String getResultCodeAndMessage () {
                     return (getResultCode() + " " + getResultMessage());
```

```
}
                 * returns the WSP response result code
 5
                 * @return the WSP response result code
               public String getResultCode () {
                     return resultCode;
10
                 * returns the WSP response major result code
15
                * @return the WSP response major result code
               public int getMajorResultCode () {
                     parseResultCode();
                     return majorResultCode;
20
                 * returns the WSP response minor result code
25
                * @return the WSP response minor result code
               public int getMinorResultCode () {
                     parseResultCode();
                     return minorResultCode;
30
                  sets the WSP response result message
35
                  @param aResultMessage the WSP response result message
                * @return void
               private void setResultMessage (String aResultMessage) {
40
                     resultMessage = aResultMessage;
45
                * sets the WSP response attributes
                * @param hash the WSP response attributes
                * @return void
50
               private void setAttributes (Hashtable hash) {
                     attributes = hash;
55
         // General Methods
```

```
parses the current result code into major and minor result codes.
                   * @return true if result code is successfully parsed, otherwise false
   5
                   */
                 private boolean parseResultCode () {
                        boolean rc = true;
                        String methodName = className + ".parseResultCode() ";
10
                        String sResultCode = getResultCode();
                        String sMajorResultCode = null;
                        String sMinorResultCode = null;
                        int iMajorResultCode = 0;
                        int iMinorResultCode = 0;
  15
                        try {
                              StringTokenizer st = new StringTokenizer(sResultCode, ".");
                              sMajorResultCode = st.nextToken();
  20
                              sMinorResultCode = st.nextToken();
                              iMajorResultCode = Integer.parseInt(sMajorResultCode);
                              iMinorResultCode = Integer.parseInt(sMinorResultCode);
                        }
  25
                       catch(NoSuchElementException nsee) {
                              System.err.println(methodName + "Unable to parse result code
                                    + sResultCode + ">");
                              nsee.printStackTrace();
  30
                        catch(NumberFormatException nfe) {
                              System.err.println(methodName + "Invalid result code <"
                                    + sResultCode + ">");
                              nfe.printStackTrace();
  35
                        finally {
                              if (iMajorResultCode <= 0) {
                                    rc = false;
  40
                              else {
                                    majorResultCode = iMajorResultCode;
                                    minorResultCode = iMinorResultCode;
  45
                       return rc;
  50
                    prints debug-type representation of the WSP Response to standard
           output
                    @param response a WSP resonse
                    @return void
  55
                 public static void displayResponse (WSPResponse response) {
                        System.out.println("Result Code: " + response.getResultCode());
```

```
System.out.println("Major Result Code: " +
                            response.getMajorResultCode());
                      System.out.println("Minor Result Code: " +
                            response.getMinorResultCode());
 5
                      System.out.println("Result Message: " +
          response.getResultMessage());
                      Hashtable attributes = response.getAttributes();
10
                      if (attributes == null) {
                            System.out.println("Result Properties: NONE");
15
                      System.out.println("Result Properties:");
                      Enumeration enum = attributes.keys();
                      while (enum.hasMoreElements()) {
20
                            String key = null;
                            Vector vector = null;
                            key = (String) enum.nextElement();
                            vector = (Vector) attributes.get(key);
25
                            for (int i=0; i < vector.size(); i++) {</pre>
                                  System.out.println(key + ":" +
          (String) vector.elementAt(i));
30
35
                 * returns the raw WSP response
                 * @return a string representing the raw WSP response
                public String toString () {
40
                      if (rawResponse != null) {
                            return rawResponse;
                      if (responseCode == null) {
                            fabricatedResponse = new String("001.001");
45
                      } else {
                            fabricatedResponse = new String(responseCode);
                      if (resultMessage == null) {
                            fabricatedResponse = new
50
          String(fabricatedResponse+"<<Message is null>>\r\n");
                      } else {
                            fabricatedResponse = new
          String(fabricatedResponse+resultMessage+"\r\n");
55
                      if (attributes != null) {
                            Enumeration enum = attributes.keys();
```

```
while (enum.hasMoreElements()) {
                                  String key = null;
                                  Vector vector = null;
 5
                                  key = (String) enum.nextElement();
                                  vector = (Vector) attributes.get(key);
                                  for (int i=0; i < vector.size(); i++) {</pre>
                                        fabricatedResponse = new
10
         String(fabricatedResponse+ key +
                (String) vector.elementAt(i) +
                                                                 "\r\n");
15
                      fabricatedResponse = new String(fabricatedResponse+".\r\n"):
                     return fabricatedResponse;
20
               }
                 Parse raw WSP text response and extract and store all components
25
                 * @param data the raw WSP text response
                * @return void
                * @exception InvalidResponseFormatException upon detection of an
         invalid response format
30
                */
               private void parseRawResponse (String data)
                     throws InvalidResponseFormatException {
                     String methodName = className + ".parseRawResponse(String) ";
35
                     // Split data by <CRLF>
                     StringTokenizer st = new StringTokenizer(data, "\r\n");
40
                     // Get the first line of the response
                     String responseLine = "";
45
                     try {
                           responseLine = st.nextToken();
                     } catch (NoSuchElementException e) {
50
                           throw new InvalidResponseFormatException("Missing first
         line");
55
                     // Extract "result code" and "result message" from first line
                     // of response.
```

```
//
                     int spaceIndex = responseLine.indexOf(' ');
 5
                     // If there is no space in the string, then the format is invalid.
                     // First line must be "code message"
                     if (spaceIndex == -1) {
10
                           throw new InvalidResponseFormatException(
                           "missing/invalid code and message");
15
                     // The code is comprised of the set of characters spanning the
                     // the first character to the space
                     String myresultCode = responseLine.substring(0, spaceIndex);
20
                     // trim any whitespace from both ends of code
                     myresultCode = myresultCode.trim();
25
                     // Attempt to convert the string result code to an integer
                     setResultCode(myresultCode);
30
                     // Extract the result message now
                     11
                     String desc = null;
35
                     // The result message is comprised of all characters spanning from
                     // the first character after the space to the end of the entire
         string
40
                     desc = responseLine.substring(spaceIndex + 1,
         responseLine.length());
                     // trim any whitespace from both ends of code
45
                     //
                     desc = desc.trim();
                     if (desc.length() == 0) {
                           throw new InvalidResponseFormatException(
                                 "Missing result message");
50
                     setResultMessage(desc);
55
                     String key;
```

String value;

```
int colonIndex = 0;
                      //if Command execution succeeded; text being returned
 5
                      if (getMajorResultCode() ==
         COMMAND_EXECUTION_SUCCEEDED_TEXT_BEING_RETURNED) {
                            int lineNumber = 0;
                            try {
                                  while (st.hasMoreTokens() ) { -
10
                                        lineNumber++;
                                        // Create a "dummy" key for this line of text
15
                                        key = "text" + lineNumber;
                                        // Get the next line from the response
20
                                        value = st.nextToken();
                                        // Break from the loop if we hit the response
         terminator
25
                                        if (value.trim().equals(".")) {
                                              break;
30
                                        // Save attribute
                                        //addAttribute(key.toLowerCase(), value);
                                        addAttribute(key, value);
35
                                        // end while
                                 // end try
                           catch (NoSuchElementException e) {
40
                                 throw new InvalidResponseFormatException(
                                        "Error splitting response by '\r\n'", e);
                                 // end catch /
45
                     else
                           // Iterate through the rest of the response, searching for
50
                           // attributes. Break from the loop when we encounter the
                           // response terminator
                           11
                           try {
                                 while (st.hasMoreTokens() ) {
55
                                        // Get the next line from the response
```

responseLine = st.nextToken();

```
// Try to find the colon (':') in the string
 5
                                        colonIndex = responseLine.indexOf(':');
                                        // If the colon is missing, then check to see if
10
         we've
                                        // encountered the response terminator. If we
         haven't,
                                        // then the response is formatted improperly
15
                                        if (colonIndex == -1) {
                                              responseLine = responseLine.trim();
                                              // Break from the loop if we hit the
20
         response terminator
                                              if (responseLine.equals(".")) {
                                                    break;
25
                                              else {
                                                    throw new
         InvalidResponseFormatException(
                                                          "Invalid attribute key-value
         pair");
30
                                        // The attribute key is everything before the
35
         colon
                                        key = responseLine.substring(0, colonIndex);
                                        key = key.trim();
40
                                        // The attribute value is everything after the
         colon -
                                        value = responseLine.substring(colonIndex + 1);
45
                                        value = value.trim();
                                        // Save attribute
50
                                        //addAttribute(key.toLowerCase(), value);
                                        addAttribute(key, value);
                                        // end while
55
                                  // end try
                           catch (NoSuchElementException e) {
                                  throw new InvalidResponseFormatException(
```

50

```
"Error splitting response by '\r\n'", e);
                                 // end catch
                    . }
5
               }//parseRawRespose
10
                * Attributes are stored in a hashtable. Since there can be multiple
                * values for the same key, we store all values in vectors. Everytime
                * a value is added for a key that already exists, we just add that
                * value to that key's vector. If a key does not yet exist, then
                * we create a new vector and add the value to it.
15
                * @param key a result property key
                * @param value a result property value
                * @return void
20
               private void addAttribute (String key, String value) {
                     Hashtable hash = getAttributes();
                     if (hash == null) {
                           hash = new Hashtable();
25
                           setAttributes(hash);
                     Vector vector = (Vector) hash.get(key);
                     if (vector == null) {
30
                          .vector = new Vector(1);
                           hash.put(key, vector);
35
                     vector.addElement(value);
40
         // End of file WSPResponse.java
45
         // ----- Copyright (c) 2000 Network Solutions, Inc ------
```

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WHAT IS CLAIMED IS:

 A method for interfacing a user application program to a system for conducting a transaction associated with managing Internet domain names, comprising the steps of:

receiving a request in an application program interface from the application program to establish over the Internet a session between the user and the system;

authenticating the right of the user to conduct a transaction associated with managing Internet domain names;

establishing a secure socket layer within the application program interface and the system;

receiving a request in the application program interface from the applications program to initiate a transaction following such authentication; and

transmitting commands from the application program interface to the system effectuating the transaction.

A method as set forth in claim 1, further comprising the step of:
 notifying the application program as to the status of processing of the command.

3. A method as set forth in claim 2, wherein:

the notifying step comprises the step of returning a response to the application program containing a statement indicating whether the transaction has been fulfilled.

4. A method as set forth in claim 3, wherein:

the statement comprises a message which includes an ASCII text portion, followed by a delimiter portion.

- A method as set forth in claim 4, wherein:
 the ASCII text portion is selected from a predefined dictionary of statements.
- 6. A method as set forth in claim 1, wherein:

 authenticating the user is determined from the Internet Protocol address,
 secure socket layer encryption, and user name and password provided by
 the application program.
- 7. A method as set forth in claim 1, wherein:

the authenticating step includes the step of at least one additional attempt to authenticate the user following a first failed attempt.

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- 8. A method as set forth in claim 7, wherein:
 following said at least one additional attempt to authenticate the user is denied
 further attempts to be authenticated should said at least one additional attempt fail.
- 9. Apparatus for interfacing a user application program to a system for conducting transactions associated with managing Internet Domain Names comprising: a component for receiving a request from an applications program to establish over the Internet a connection between a user and the system;
 - transaction associated with managing Internet domain names;
 a component for establishing a secure socket layer within the apparatus;
 a component for initiating a transaction following such authentication and
 following receipt of a request from the applications program; and
 a component for transmitting commands for effectuating the transaction
 via the secure socket layer to the system.

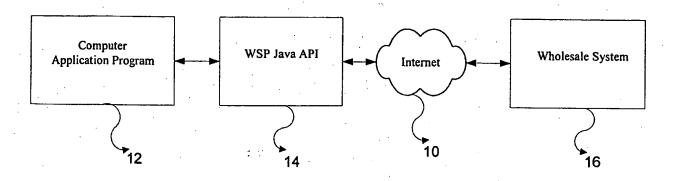


FIG. 1

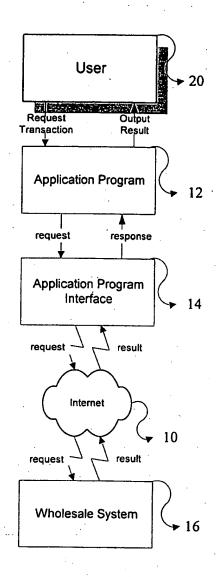


FIG. 2

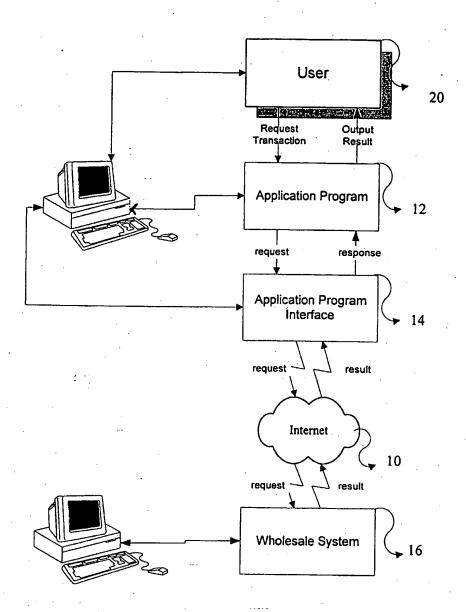
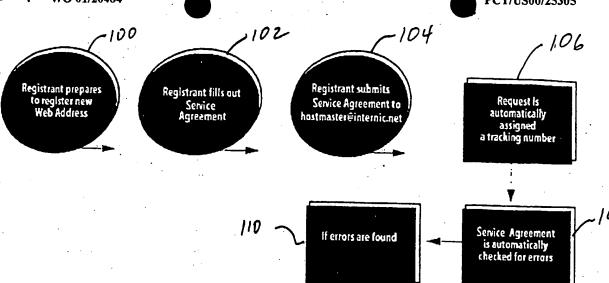


FIG. 3



Service Agreement is processed registrant is notified via email when completed

Your Web Address registration is complete

Network Solutions invoices customer for the Web Address registration

Registrant pays for Web Address registration

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Hetwork Solutions sends re-registration notice to registrant 60 days before the 2 year anniversary of the initial registration

FIG. 4 PRIOR ART